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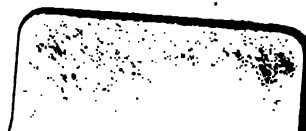
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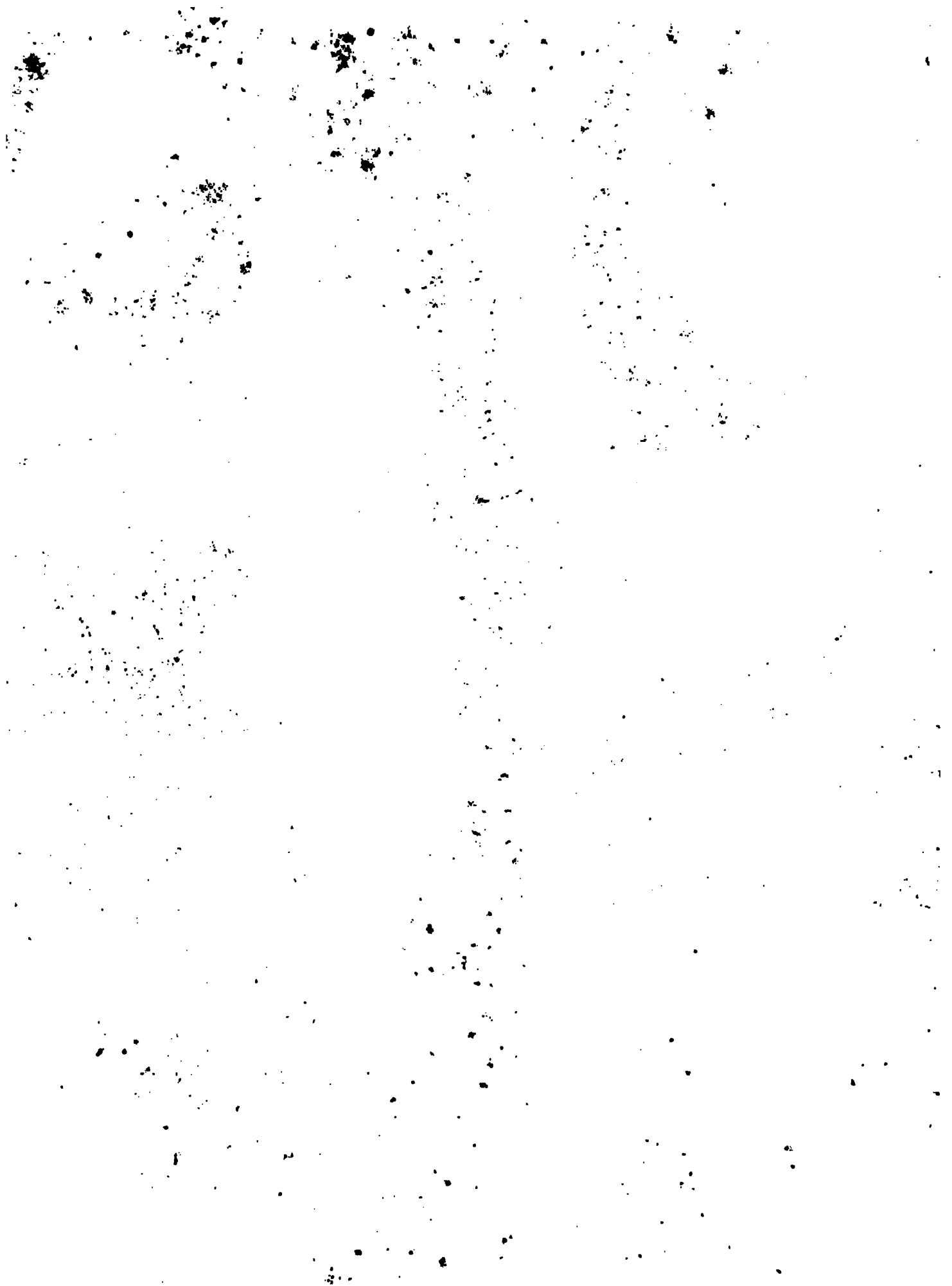
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ILLUSTRATIONS OF TRACTS

ON THE

GREEK-EGYPTIAN SUN-DIAL, WITH SEVEN STEPS, ETC.:

BEING THE

SECOND AND THIRD SERIES OF ILLUSTRATIONS

FOR

TRACTS ON CHRISTIANITY IN ITS RELATION TO
JUDAISM AND HEATHENISM, ETC. ETC.



BY THE LATE

REV. WILLIAM HEWSON, M.A.,

VICAR OF GOATHLAND.

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LIST OF QUARTO ILLUSTRATIONS.

PART I.

A descriptive list of the first 38 will be found in the tract immediately following p. 62.

39. **Stands** as 1st of *three*, designed for friends at the British Museum. This is an explanation of the Greek-Egyptian Dial's structure, accompanied by a perspective representation of it as photographed in front, and on its west side, from the Model exhibited at Paris.
40. As 2d of the three for the British Museum. This illustrates the seven steps of the Greek-Egyptian Dial from the seven Dwipas of the ancient Hindu Philosophy.
41. As 3d and last of do. This divides the Equinoctial to a year of three seasons, represented by the three Avasthanas, *or great divisions*, numbering 27 asterisms in the philosophy of the ancient Hindus. By a metaphor from this, the most ancient division of their VEDA (or sacred book) numbered only *three* parts. Its division into four parts followed that of the Equinoctial to a year of 28 asterisms of 10° each, supplemented by 80 to Hydra, typically measuring the NODAL life of the Egyptian APHOPHIS, *by two days of 40 each*.

To the above the following *nine* were added for the binding in 1868 ; though not enumerated in the above-mentioned list, which was printed long before the then binding of half-dozen copies, which stamped the state of progress at the Grosmont Confirmation in the April of 1868.
- 42-45. Differing Modifications of the East and **West** Quadrant Dial, in its typical relation to the Mythic History of Jason and Medea.
43. Ditto, compared with the Dragon symbolism of the Ancient Orientals, for the Moon's Nodes.
44. The Jambu Dwipa of the ancient Hindu Dialling Geography.
45. The Symbolic trees of Life and Knowledge.
46. Vishnu on his Porpoise, as Arion on his Dolphin.
47. Charon, in his Argonautic ferry-boat ; copied from a photograph of Spanish armoury, with allegorical designs of ancient history embossed thereon.

The collection in the British Museum amounts, I believe, to 92.

The above complete the illustrations of PART I. which terminates with page 104 of these Dialling tracts.

PART II.

1. The Hieroglyphic Frontispiece, with symbols of Assyrian and Egyptian origin.
2. The "Winged Disc," or Seraphic emblem of the ancient Egyptians, for the Meridian of their East and West typical Dialling. From Dr S. Birch's Egyptian Antiquities in the British Museum.
3. Egyptian Hieroglyphics, from a fragment of an Obelisk at Rome. From No. 3 to 5 (b) inclusive associates this stage of the thought with a visit to Cambridge in July 1868 ; whilst 5 (b) commemorates a visit to the Leed's Exhibition and Far-Headingly in the October following.

4. The Structure of the Greek-Egyptian Dial delineated as that of a direct South Dial by the late J. B. Smales, Esq., of St John's College, Cambridge.
- 5 (a) Ancient American Cross, from "Stephen's Central America," sketched by the late J. B. Smales, Esq.
- 5 (b) Christian and Phœnician symbols for the Cross with the mortuary emblems of heathen Rome, and a Mithraic emblem, from a MS., exhibited at Leeds, as belonging to the late Emperor Theodore of Abyssinia.
6. Heathen notions of the crucifixion, associated with the Christian doctrine of the resurrection, and the fruit of the tree of life restored to man in Christ. See Hepay's contributions from Rome to the "Art Journal."
7. The "eye of Providence," amongst the symbols on the Planisphere of Tentyra, given to that on the prow of a Chinese Junk. It is here grouped with the symbols of the old Egyptian Planisphere, as Noah's ark is with those on our own celestial globe; to mark the probable origin of the typical structure given to the ships of Tarshish, and to the sacred ships of the Egyptians, Greeks, and other Orientals, as derived from their traditions respecting Noah's ark. See also Plate XVI.
8. Diagram to illustrate the relation of Israel's midnight darkness in Egypt, to the 40 years of wandering in the wilderness by which it was followed, before being led northward by Joshua, *into the land of Israel's promised rest*. This was thus symbolised as *the rest of a people called children of light and of the day*, in contrast to the people of an outer world, symbolised as remaining in darkness and the shadow of death, after the Exodus of Israel out of Egypt. *The consummation of that Exodus being reserved for Joshua, the type of Christ, man's SUN OF RIGHTEOUSNESS* (after a wandering in the wilderness southward for 40 years under the guidance of Moses and Aaron), was thus symbolised to the Sun's North Declination; as to ascending light eastward going north from the Vernal Equinox, for the summer season.
9. Professor Smyth's vertical section of the great Pyramid, etc.
10. The Varshas and Mountains of the earth, spanned by the Lotus symbolism for the earth, on a Quadrant of the Equinoctial, for a measure of the week of 9 days, to the diurnal arc of their east and west typical dialling, in the philosophy of the ancient Hindus.
- 11 (a.) Manetho's XXX Dynasties.
- 11 (b.) The 50 Sons of Egyptus and 50 daughters of Danaus numbered eastward and westward to the north and south—like the Dove and Raven of the Jews—compared with the Lion and Unicorn of our national arms, for symbolisms of ascending and descending light, on the east and west quadrant dialling of the ancient Orientals.

Note also the reference of the same symbolism to the difference of form in which Joseph sought the blessing of Jacob on Ephraim and Manasseh, in contrast to that of the typical form chosen by Jacob, and compare Psalm lxxxi. 3, 4.
12. Another form of adapting our national emblem of the Lion and Unicorn to the Dove and Raven of the Jews, on an east and west Quadrant Dial.
13. The typical structure of a Chinese junk with the "eye of Providence" on its prow, compared with the east and west quadrant dialling arc of typical account, amongst the ancient Orientals.
- 14 (a). The old Saxon Dials at Kirkdale and Edstone, Yorkshire.
- 14 (b). An East and West Dial for 12 hours of Enoch, as hours of 80 minutes to 20 degrees of the Equinoctial, in explanation of the lines on the Saxon Dials.
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16. Gnomons for Dialling by a point of light, and point of shadow.
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18. Meridians from Bedos de Cellos for Horizontal, South Vertical, and Declining Dial Planes.
19. The Geometric Structure of the Greek-Egyptian Dial compared with the fundamental Diagram in the Dialling of Sylvanus Morgan.
29. To keep the hour-lines of a Declining Dial within a right-angled parallelogram, by Sylvanus Morgan.
- 21-24. The relation of the steps to the curves of the Greek-Egyptian Dial, illustrated from the Dialling of Sylvanus Morgan.
25. The astronomical pillar in the Court of Art, by Sylvanus Morgan.
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- 27-34. Various attempts to illustrate the structure of the Greek-Egyptian Dial with Steps, considered as the hollow semi-circle of Babylonian origin, adapted to a Quadrant measure of Ascending and Descending Light by the ancient Egyptians.

35. The Hindu Zodiac for the week of 9 days (as $9 \times 40 = 360$), divided to the hour lines of an East and West Dial, for comparison with the East and West Dialling of Sylvanus Morgan, p. 55.
36. The two Dials at Sleights' Church, near Whitby.
37. The Vertical Declining Dial, by the Bridge, on entering Lofthouse from Whitby.
38. The Theatre of MACAO from a *small* photograph purchased at an Exhibition in Pall Mall, London, of Chinese scenery in a Gallery of water-coloured paintings by Hildebrandt, 1865. My reason for allowing this to be grouped amongst the other Illustrations of Oriental Dialling account, is a conviction that all ancient theatricals were more or less associated with their early traditions of religion, even as the theatres of the Greeks and Romans were identified with the worship of Bacchus, their Sun-God.
- 39 and 40. New designs for the outside Wrappers, No. 39, for the Octavo volume, compares the symbolic Tree of Life (found amongst the old Assyrian Sculptures at Khorsabad), with the decorated Cross of the mediæval Christian Church, as symbols of a common typical origin astronomically.
40. For the Quarto volume may be explained as below, in its relation to the flaming sword of Gen. iii. 24 :

The horizon in this case is a parallel to the water-level of the Nile in Piazzi Smyth's Meridian section of the great Pyramids.

The intersection of the Meridian by the Equator and Earth's Axis on the Horizon explains the source of the metaphor used in the "*flaming sword*," which turns every way to guard the way of the Tree of Life—as to God's keeping—as the light of life to man : Gen. iii. 24.

Thus the ancient Hindus accounted for the contrast of Waters looking dark by day and light by night, because the waters covered the sun by night which returned to Earth by day.

See the Vishnu Purana, p. 220.

South Declination to the Moon's Descending Node, eastward and westward for the hours of a Horizontal Dial, giving the hour of XII., Northward on the Horizon to Midday—though that of Midnight on an East and West Dial.	Full Moon to Midnight.	The Evening of the primeval day, typically gave the Moon's entrance into her Descending Node, westward in VIRGO, to the beginning of the Sun's South Declination from the Equator.				The Morning of the primeval day typically gave the Moon's entrance into her Ascending Node westward in LEO, to the Sun's entrance into his North Declination eastward in Pisces, for the old year of three seasons, numbering (in lunar form) 27 asterisms of 10 ² each from VIRGO.			
		6th Day.	7th Day.	2d Day.	3d Day.	New Moon to Midday.	North Declination to Moon's ascending Node, eastward and westward; for the hours of a South Vertical Dial, giving the Noonday hour of XII. southward to the Horizon. Hence the meaning of the Mount of Olives, being typically divided towards the four winds of heaven, is that the influences of Christ's "everlasting Gospel" should thus pervade the earth therefrom.		
		9. Friday. ♀ Venus.	8. Saturday. ♄ Saturn.	7. Monday. ♃ Moon.	6. Tuesday. ♂ Mars.				
		<div><div><div>↑</div><div>♄</div><div>♃</div><div>♂</div><div>♀</div></div><div>Hours of West Dial to Eastern Signs.</div><div>XII. 11 10 9 8 7 VI. 5 4 3 2 1 XII.</div><div>1 2 3 4 5 7 8 9 10 11</div><div>Hours of an East Dial to Western Signs.</div><div>♄ ♃ ♂ ♀ ♁ ♂</div></div>							
2. Thursday. ♃ Jupiter.	3. Descending ♄ Node.	4. Ascending ♃ Node.	5. Wednesday. ♀ Mercury.						
5th Day.		Nodes Going out.		4th Day.					
<p>The 6 months of the sun's south declination, given typically to our Lord's descent into Hell (as the Hades of the Greeks) as a symbolism for the grave under a two-fold reference: 1st, As an Elysium to the spirits of the blessed; 2d, As a place of never-ending torment to the condemned of man's judgment, which was the case of Christ's death, until reversed of God with eternal glory in the power of His resurrection. .</p> <p>But that was reserved for a typical teaching from the Sun's North Declination given to commemorate God's harvest mercies to man.</p> <p>The reason was because the generation to whom the Gospel was first preached (at the sound of the seventh trumpet, or that of the harvest month), knew not how God's harvest-symbols of bread and wine were ordained to be an annually-renewable memorial in Christ (John vi. 48) that God willed mercy rather than sacrifice.</p> <p>For the law of ceremonial sacrifices was one of restricted application to the typical kingdom of Jewish nationality in the land of the Canaanite. See Daniel xii.</p> <p>The only sacrifice under God's new covenant of mercy, to both the houses of Israel, throughout their dispersions amongst the Gentiles, is that of self-humiliation for sin, looking to God for grace unto redemption from its bondage in righteousness: as God's appointed law of life, common both to Jew and Gentile in Christ.</p> <p>With the above compare the miracles of the loaves and fishes :</p> <p>John vi. 9, 13. The five loaves of the five thousand leaving twelve baskets of fragments.</p>									
<p>The 6 months of the sun's north declination to the "6 water pots of of stone, containing 2 or 3 firkins a-piece (John ii. 6), after the manner of the purifying of the Jews." .</p> <p>These symbolise the effects of dew and rain, in their fertilising influences on earth, for the interval between spring-time and harvest, to the use of water as a symbol of Regeneration in Baptism.</p> <p>Their conversion into wine, at the marriage-feast of Cana in Galilee (when the seventh new moon, as that of the autumnal equinox, typically numbered 3 days to 6 months, from the full moon of the vernal equinox), brings us to our harvest commemoration of God in the Lord's supper, as an indication that He willed mercy rather than sacrifice (Matt. xii. 7; Psalm lxxxi. 3, 4; Matt. xiii. 39). The atonement of seven days (Exod. xxix. 37) made that of a seven years' cycle in the week of 7 years, for confirming God's covenant with many (Dan. ix. 27).</p> <p>We must here remark that the seventh Jewish month of 28 days began in the sixth zodiacal sign, which measured the distance from the new to the full moon, and inversely.</p> <p>This illustrates the seven stars in the angel's righthand. When reckoning from the Winter Tropic Eastward to the vernal Equinox for the Messianic beginning of typical and prophetic time (Rev. i. 16).</p> <p>Matthew xv. 34-38. The seven loaves of the four thousand, leaving seven baskets of fragments.</p>									

The above reference to the changing of water into wine at the marriage-feast in Cana of Galilee, reminds me of an epigram I remember having seen in my schoolboy-days, at St Paul's, London; but whether as an old tradition, or as the translation of a senior schoolboy from the words, "The modest water saw the Lord and blushed," in a then well-known child's book, called "Edward Manderville," I cannot say. The last line is all that I can remember of the Latin epigram, whilst convinced that there was at least one other. I have therefore roughly completed the distich to connect the beautifully-expressed latter line, which I distinctly remember, with its subject:

Nuptis numen adest; lympharum vasa* parantur;
"Conscia lymphæ Deum vidit et† erubuit."

* The six water pots, after the manner of the purification of the Jews, holding two or three firkins a-piece, symbolise the 6 months of the sun's north declination divided to 12 half-months, compared with 12 equinoctial hours, or divided to months of 3 weeks each, for the semi-equinoctial of 180, measured by the 18 Ethiopians of Herodotus.

The East and West *typical* dialling of the ancient orientals, thus considered, unfolds to us the origin of the metaphor used in Zechariah's typical prophecy, respecting a day *then known only to the Lord*, viz., that of Messiah's advent, in a cloudy and dark day—the day of the heathen;—as a day in which it should not be clear or dark until *the evening, which dated the beginning of Lunar typical time from the Sun's South Declination*.

Thus God's two witnesses (His Word, and His Works personified in Christ) prophesied in sackcloth for 1260 days preceding the Crucifixion of Christ as Messiah. That was at the Passover in the midst of a week of seven years, reckoned from 7th month to 7th month, as from harvest to harvest; from atonement to atonement; or from *New Moon to New Moon*; divided in the half by the Paschal *full moon*. Compare Eph. iv. 9, 10, with Rev. xi. 3 : xii. 14.

But the Sun's South Declination for the old year of three seasons was then given to the Moon's descending node in VIRGO. His North Declination (made to symbolise Messiah's resurrection glory) was, on the other hand, given to the Moon's ascending node in LEO; whilst the Sun's North Declination would be reckoned *Eastward to the rising sun*, as the position assigned for the encampment of JUDAH, before their typical tabernacle.

Thus we trace the source of the metaphor used in the typical prophecy relating to Messiah's birth of a pure *Virgin*, to identify his Advent with the pure Gospel teaching of a Reformed Jewish Church, in contrast to that which had been previously teaching the fear of God only by the precept of man. Hence the phraseology of Jewish typical prophecy, discriminating between the idolatrous tendencies of both the houses of Israel, under the personifications of AHOLAH and AHOLIBAH (Ezek. xxiii.); and the life-preserving energy of a purer faith, as the strength of Judah against Sennacherib in Hezekiah's day, saying of the Assyrian, "The VIRGIN, the *daughter of Zion*, hath laughed thee to scorn."

We must here, also, remember that the position assigned to the encampment of EPHRAIM with BENJAMIN before their typical tabernacle, was Westward to the setting Sun; in contrast to that of JUDAH Eastward to the rising Sun: whilst Messiah's Advent was predicted as *the rising of the SUN of RIGHTEOUSNESS with healing on his wings*.

This, moreover, serves to illustrate the typical ordinance for the division of the land to the 12 tribes in the day of their return from Babylon, viz., *seven* to Judah, Eastward and Westward to the North; and five to Benjamin, Eastward and Westward to the South of the Holy Oblation in Ezekiel's vision of typical prophecy.

The old week of 8 days, as $8 \times 45^\circ = 360$, was reduced to one of $8 = 40 = 320$; as from that of $9 \times 40 = 360$ by omitting Sunday; because the Sun shines on all days. For it is clear that this was in fact the old week of 9 days, by Friday being numbered 9 thereon; but typically divided to their eight Regents of the sphere, *as to the Cycle of their new moons*. See the observation of Mr E. Sang, Edinburgh, on the 11,341 years of Herod, considered as the days in 30 solar years, or 31 Lunar years in 32 years, each numbering 12 lunations of 29d. 12h. 42m. mean time, or 354d. 8h. 48m. yearly.

This also explains how Thursday was the *second* day of the week when beginning from *Jupiter to the Conjunction of the Sun and Moon Westward in VIRGO*, as from the beginning of the Sun's South Declination to the Moon's descending Node (Ketu) on that Zodiac. When Thursday to Jupiter was numbered 5th day in a week of 7 or 9 days beginning from Sunday, the beginning of that week was given Eastward to the Sun's North Declination, and the Moon's ascending node (RAHU) *beginning his quadrant circuit from the Sun to the Moon and back again in LEO on that Zodiac*. Hence the celebrated Lion *Jos* of the Chinese and other orientals divided into pairs for Ascending and Descending light. Captain W. H. Marwood, of the Artillery Volunteer Corps, Whitby, brought with him from China *two* of these *Joses*, or Nodal symbols, for their DIESPATER or daily providence. On one of these the Lion has his paw upon a dog, as if subdued; but on the other the dog seems to be baiting the Lion. The Dog I take to be a symbol for *the Dog star in Cancer, the Zodiacal sign next before Leo*.

He brought also with him, from China, another symbolic group of figures, one of which got broken on the road, and its place is supplied by a *Budha* or *Ganesha*, or the Hindu Janus, from the Elephant's proboscis thereon. From this, therefore, no opinion can be formed as to the meaning of the group; all of which, with one exception, are carved in soap stone. The one exception is a *black* figure, forming one in a group of *seven*; with a group of *three* below. The centre of these three is as a Child on or seated by a Dragon. He tells me that is a symbol of very great esteem amongst them; and I think it probably of the same significance as the HORUS of the Ancient Egyptians, between ISIS and OSIRIS; viz., as the Man in the Moon, when first appearing in infant form, near the place of the new Moon; *before* beginning his reign of 20 days in the first lunation of the year, as in all the rest, making 12×20 or 240* for his reign of Lunar light yearly, when the

* $240 + 60$ made up their Noah's ark Lunar year of 300 days, as $300 + 60$ made up their typical and prophetic Solar year of 360 days.

supplement of 240 to 360, or 120, was limited over the diurnal arc for man's day on their East and West typical Dialling, as in Gen. vi. 3, for 120 lunar years of 300 days to 100 old Chaldean solar years of 360 days.

The one *Black symbol* was probably the NITOCRIS of Herodotus, or the Queen of the 18 Ethiopians, numbered to the celebrated oriental cycle of the 330 kings.

For this Cycle numbered a year of *eleven* months to a day of *eleven* hours. Hence, on the hollow semicircle of the ancient Babylonians, reckoning 12 hours from sunrise to sunset, with the XII. o'clock hour of a polar dial reckoned as their *sixth*; it was typically numbered to the hour going out at XII. on an East and West Dial, but at VI. on a polar dial. Hence the sixth hour, as that of the Crucifixion, is called in Luke the hour of the Jewish Church, and the power of darkness.

For the 18 Ethiopians were 18 planetary cycles of 5 to the Quadrant of 90; or 18 Lunar Asterisms of 10° , each for 18 weeks of 10 days measured over the semicircle of 180; as given to the Sun's North Declination for six zodiacal signs, from the Vernal to the Autumnal Equinox, *extended by one from the Sun's South Declination to complete a summer season of seven months*, numbered on the centre of their typical dialling, (as in Isa. xxx. 26), to the Jewish Pentecostal Cycle of 7×7 for the Divine age of 5×10 .

The Planetary Calendarium for the week of 8 days, by which the ancient Orientals divided the Equinoctial to their 8 regents of sphere, for $8 \times 45 = 360$, compared with a week of 9 days numbering 9×40 ; and subsequently reduced to one of 8×40 , numbered 8 times for the 2 months extending over 64 days, during which Krishna and Bala Ramar (as the Sun and Moon, for the sun between his tropics to the Moon between her nodes) practised their military exercises in the Gymnasium of SANDIPANI (*See Vishnu Purana*, p. 561). The two months in this case supplemented the old Lunar year of 300 days to Enoch's solar year of 364 days, numbering 13 lunations of 28 days.

Similarly their celebrated cycle of 330 kings seems to commemorate the time when the zodiacal angles began to be reckoned at 24 (for $23\frac{1}{2}$ omitting the fraction) instead of at 25° , as supplemented by the 65 of Isaiah vii. 8. For 66, the complement of 24, multiplied by their planetary cycle of 5, give the 330 exactly.

We see thus also how their month of 32 days, formed from the old Egyptian week of 8 days, gave rise to a Lunar year of 10 months numbering 320 days. Hence the solar season of *two such months together, numbering 64 days*, which the Hindus dedicated to Krishna and Bala Rama.

The hour and day and month and year of Rev. ix. 15, associates the hour of darkness, *as the sixth of their typical time*, with the Nodal idolatry of the old Baalists, which was based on the old Chaldean solar year of 360 days. This they divided between a Lunar year of ten months and a *solar season of two months, typically divided between ascending and descending light, as between the moon's two nodal days; one of which, the first-born to descending light, was fated to go out before the rising power of ascending light*. Thus "the hour of the Jewish Church and power of darkness" (Luke xxii. 53) refers to the Crucifixion of Christ as a *consequence of those idolatrous superstitions to which importance was attached* by the Rulers of the Jewish people, when Caiaphas said to his opponents, "Ye know nothing at all, nor consider that it is expedient for us that one man should die for the people, and that the whole nation perish not." The explanation of the text is,—*"And this spake he not of himself: but being high priest that year, he prophesied that Jesus should die for that nation."* This requires careful consideration. For it means not that he prophesied truly and in fulfilment of a righteous inspiration; but that he, as high priest, having reputation amongst the people as a prophet commissioned of God by Moses, made a wrong and superstitious use of the reasoning faculties given him by God, when he confounded their typical law relating to the Scape-goat, with the Gladiatorial decision between right and wrong, morally, in obedience to which it was necessary that one of the parties must die, except by some almost miraculous interposition in favour of the vanquished one. The idea was borrowed from the sixth hour of a Polar dial, or the twelfth of an East or West Dial, going out in the division of typical time, between Ascending and Descending light thereon. For the 12 hours of their typical day were thus reduced to a Cycle of eleven, dedicated to the 330 Kings of the ancient Orientals, as impersonations of the nation's *Diespater*, daily for the old Chaldean year of 360 days less one month. Enoch's solar year numbered 365, according to (Gen. v. 23), though reckoned as 364 in the Ethiopian astronomy of Enoch, translated by Richard Laurence, LL.D., Archbishop of Cashel, and late Professor of Hebrew in the University of Oxford. Published by J. W. Parker, Oxford, MDCCCXXXVII.

The typical structure of the Greek-Egyptian Dial with Steps was certainly framed to combine a *Lunar Calendarium* for devotional purposes, with their dialling Chronicle of passing solar time.

Howsoever they might vary the planetary dedication for the *first hour and day, etc., of this typical Dialling*, it always compared a day of 30 Muhurtas with a month of 30 days, dividing their *Muhurtas* and *days* into six planetary Cycles of five, for five, six, and seven months, etc., etc.

Their Dial with Steps was a *Quadrant Universal Dial* for 45° , inclined Eastward at an angle of 28° for Horeb; when substituting Jewish months of 28 days, or 4×7 , for the old Chaldean months of 30 days, divided into three weeks of 10 days monthly; for 9 weeks of 10 days to 10 weeks of 9 days to the Quadrant of 90° . Thus they measured also 9 months of 30 days to 10 of 27 days; for the Cycle of their Lunar year, as ending in Haggai II., with the *ninth* month; but at other times with the *tenth month as commemorated by the ancient Romans in the word December*.

It appears also that the typical structure of the Greek-Egyptian Dial will explain the perplexed passage already quoted from page 484 of the Vishnu Purana in Tract, p. 89 of this volume.

My friend Mr James Wood agrees with me in thinking that the only intelligible meaning for the words, "When the two first stars of the great bear (viz., the two pointers *Dubhe* and *Merak*) rise in the heavens, and some Lunar asterism is seen at night at an equal distance between them, is to conceive that they speak the language of an astronomical observation originally made for the Latitude of Tentyra 26° , or of the Pyramid plain 30° , or by Moses for the Jews before Horeb in N. Lat. 28° . For the Horizon could not be cut by a line passing midway between them, unless it represented the circle of perpetual light, for a latitude near 26° or 28°

Thus for lat. 28° Mr Wood estimates that the angle between the meridian, or the hour circle, cutting the Horizon near the Circle passing midway between the pointers would be 18° or 20° . Either angle has much typical significance, that of 18° (or Pheron's hour) being the measure of twilight. That of 20° for the beginning of the Sun's right ascension from Aries, made the angle beyond which Eclipses could not occur, a measure of 40 for Sunday to the Sun on the Equator, divided equally between ascending light to the Sun's North Declination, and Descending light to the Sun's South Declination.

By Lunar Asterisms we learn, from the Vishnu Purana, p. 226, that they meant weekly lunar circuits of 9 days in months of 27 days for a lunar year of 270 days supplemented by 90 to the Nodes. This form of the lunar year, they began from the Lunar asterism called the *Aswins*, in the Zodiacal sign *Libra*. Their Lunar year of 280 days had for its first Lunar Asterism *Crittica in Virgo*. This form of the Lunar year was supplemented to 360 by 80 to APHOPHIS (a Sun Pharaoh) for two Nodal days of 40.* If therefore the Equinoctial was divided to the lunation of 30 days, and also to the Sun's right ascension beginning from Aries, for the first New Moon of the Year, the point in which a circle passing midway between the pointers at rising would cut the horizon in an angle of 18° or 20° would be in Crittica the third Lunar asterism of 9° from the *Aswins*. The remaining in that conjunction for 100 years of men, would be for 10 days in the month of 30 days. This week of 10 days they measured by a chord of 120 to $\frac{1}{3}$ of 360 yearly. This darkening of the heavens for ten days (as then limited over the monthly approach of the Moon to the Sun) gives the source of the Metaphor used in the going down and return of the Shadow by 10 degrees on the steps of AHAZ.

THE THREEFOLD LUNAR CALENDARIUM OF THE ANCIENT ORIENTALS, WITH ITS PLANETARY DEDICATIONS FOR THE DAYS OF THE WEEK.

These dedications for the days of the week originally followed the numbering of the planets in the order of their orbits (See Cicero's *Som. Scip.*, cap. iv.), beginning from *Saturn* the outermost, and taking its cycle of 30 years for the basis of a typical comparison between the old Chaldean Solar year of 360 days, and their monthly Lunar year of 30 days, numbered to the cycle of their new moons as days of years. This may throw a light upon the circular shrine provided by Manetho for deifying the ancient kings of Egypt to the extent of 30 dynasties.

The second to Jupiter, shows why Jupiter was numbered as second day in a week, which numbered all its days as beginning in the moon's descending node, for the evening before the morning of their primeval day. For when Sunday to the sun beginning his north declination from the Vernal Equinox was made the first day of the week, Thursday to Ascension Day became the fifth, which was the place of Wednesday on the old Hindu Zodiac, which numbered Thursday to Jupiter for descending light to the second day of the week. Hence on their typical Quadrant Dialling for the Cycle of 5 beginning from Jupiter. Wednesday (dedicated to Mercury as the Caduceus bearer of Jupiter) notified the turning point between ascending and descending weekly Lunar light. This explains how the *Ember Days*, Wednesday, Friday, Saturday, were made to notify the beginning of the four seasons, equally from descending lunar light, for all seasons of the year. See the

* Hence the division for the steps, which explains the going down and return of the shadow on the steps of Ahaz by 10 degrees, sets off those 10 on the quadrant of 90° to the top step, for the Sunday to the Sun on the Equator, ruling over the other six planetary days of the week, divided equally between ascending and descending light (like the six days of creation, Gen. i.), as between two nodal days of 40 each, = 6 lunar asterisms of 13 and one-third each; for Enoch's $7 \times 13 = 91$ for 90. This fact I have proved to my own satisfaction this morning, 27th February 1870.

Calendarium of the Ancient Christian Church in the Preface to our Book of Common Prayer. Thus also the Monday, Tuesday, and Wednesday to ascending lunar light, *over their dialling arc for Man's day* (measured by Jonah's journey of 3 days across the great city NINEVEH) whilst typifying its culminating glory to Holy The ascension day, as to the beatified spirits of their dead. Thus as the Orbit of Saturn was made a basis for compa monthly lunar year of 30 days, with their solar year of 360 days; so was the twelve years' Cycle of Jupiter t basis when dividing *their planetary day* to 30 *Muhurtas* of 12° each, or 48 minutes to a planetary hour when *their day* of 30 *Muhurtas* with their month of 30 days.

Thus we arrive at the first two stages in the construction of their "*Magnus Annus*," by multiplying the or planets into one another. For the next was Mars, whose Cycle of nearly two years increased by two for the Venus and Mercury shows how the ancient Egyptians framed their great Sothiac period of $4 \times 360 = 1440$ day This they also called their *lustrum* or 5 years' Cycle for 5 Lunar years of 280 days in 1400 days.

Next in order came the Sun (viz., as next to Mars, but with varied relation to Venus and Mercury), to whc they thus dedicated their great Sothiac Cycle of 1440 typical years. These multiplied by their Lunar year of produced their "great year" or Cycle of 432,000 mythic years, symbolised as years equally over the seconds of days of 24 hours as over 1200 Solar years of 360 days, estimated also as 1200 monthly Lunar years to the sœculum of 100 years.

To the Sun in the Moon's Descending Node, as in South Declination from Thursday to Monday.						To the Sun in the Moon's Ascending Node, as Declination from Sunday to Thursday.					
Their fixed Cœlum, or Heaven, the primum mobile of the 9 planetary orbs. Som. Scip. cap. iv.		Central Sun to Mars & Venus & between the Moon's Nodes.				Mercury to the Sun.		Moon.		Earth the ninth and lowest of their orbits, but of no account to the Calendarium. This therefore is the JAMBU DWIPA of the ancien	
		Cœlum.	Saturn.	Jupiter.	Mars.	Venus.	Mars.	Mercury to the Sun.	Moon.		
		1	2	3	4	5	6	7	8	9	
Or thus numbered to their Calendarium.			1	2	3	4	5	6	7	—	
					♄ ♃ ♉ ☉ ♋ ♂			☿ ♀ ♁ ♀			
Saturday	7	5	3	1	6	3	Monday.
Sunday	1	6	4	2	7	4	Tuesday.
Monday	2	7	5	3	1	5	Wednesday.
Tuesday	3	1	6	4	2	6	Thursday.
Wednesday	4	2	7	5	3	7	Friday.
Thursday	5	3	1	6	4	1	Saturday.
Friday	6	4	2	7	5	2	Sunday.
Saturday	7	5	3	1	6	3	Monday.
Sunday	1	6	4	2	7	4	Tuesday.
Monday	2	7	5	3	1	5	Wednesday.
Tuesday	3	1	6	4	2	6	Thursday.
Wednesday	4	2	7	5	3	7	Friday.

Here we have 12 Cycles of $5 \times 10 = 50$; as the $7 \times 7 = 49$ of Jewish Pentecostal reckoning, for a Lunar Calendar ing 600 days of years typically between day and night, measured to ascending and descending light on the cent East and West Quadrant Dialling by the two Zodiacal angles, estimated at 25° each.

This will illustrate the 600 years of Noah's life preceding the flood, as typically numbered to the days and night then Lunar year of 300 NYCHTHEMERA.

But they seem also to have divided this Calendarium unequally; viz., as 6 Cycles of 5 taken 12 times to mak Solar year of 360 days. The remaining 4 Cycles of 5 they also numbered 12 times to the longest day of astronomy of the ancient Enoch.

If, however, we divide the 12 days of this Calendarium into seven days on the one hand, as $7 \times 50 = 350$ to the Post-diluvian age of Noah's life, we obtain for the remainder of the Calendarium 5 days to be multiplied by 50, for a numbering of their Divine age over each day, made thus to represent a Cycle of 50 days, to the extent of 250° the number of the Censers which characterised the rebellion of Korah, Dathan, and Abiram, as of one which sought to make Israel apostatise to the renewed worship of the Nodes.

Now the typical year of the Jews was limited to a seed-time and harvest of *seven* months, in contradistinction to the old Baalistic division of the Solar year of 12 months, between a Lunar year of ten months and a Solar season of two months, thus numbering only six Planetary Cycles of five to each month of 30 days compared with a day of 30 Muhurtas, or planetary hours, we have $7 \times 30 = 210$ for the longest day in Palestine and the Pyramid plain, supplemented by $5 \times 30 = 150$, for the Winter season of their traditions relating to Noah and his Ark.

Thus omitting the Planetary symbol of \odot on this Calendarium to identify the Solar glory with that of God's mercies daily renewed for all the days of the week, as referred to in *Isaiah xxx. 26*, we have seven days numbered conjointly to the sun and moon from two beginnings. The first was from Wednesday to Mercury, the second from Friday, dedicated to Venus, as the Great Diana of the Ephesians, whose image fell down from Jupiter, when the first *new moon* of the oldest Oriental year was numbered to the sun at the Winter Tropic, between \mathfrak{m} and \mathfrak{f} . This form was followed in the Calendarium of the Mediæval Christian Church, when numbering Wednesday, Friday, and Saturday as *ember* days to the beginning of each of the four seasons, as an ordinance framed for applying a lunar Calendarium to the quadrant measure of their East and West Dialling arc.

Compare Genesis xlvii. 2 on the five brethren of Joseph, with the South of the Holy Oblation, Ezek. xlviii. 22-28.		♀	♂	h	z	☉		
	Wednesday	4	2	7	5	3	1	Sunday
	Thursday	5	3	1	6	4	2	Monday
	Friday	6	4	2	7	5	3	Tuesday
	Saturday	7	5	3	1	6	4	Wednesday
	Sunday	1	6	4	2	7	5	Thursday

Mercury, the Caduceus-bearer of Jupiter to the Sun in his south De- clination for the half-weekly Cycle of 5 days.			
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Mercury, the Caduceus-bearer of Jupiter to the Sun in his south Declination for the half-weekly Cycle of 5 days.

Compare Genesis xlvii. on the settle- ment of seven tribes northward in the land of Goshen with Ezek. xlviii. 1-9, and Isaiah xxx. 26.	Monday	2	7	5	3	1	6	Friday
	Tuesday	3	1	6	4	2	7	Saturday
	Wednesday	4	2	7	5	3	1	Sunday
	Thursday	5	3	1	6	4	2	Monday
	Friday	6	4	2	7	5	3	Tuesday
	Saturday	7	5	3	1	6	4	Wednesday
	Sunday	1	6	4	2	7	5	Thursday

Monday to the Moon going forth with the Sun in his North Declination; for the weekly lunar Cycle of seven days.

This Calendarium doubled, for 12 days of 12 hours, etc., substitutes the celebrated Jewish Cycle of $12 \times 12 = 144$ for the old Baalistic Cycle of $12 \times 10 = 120$, and as over Nineveh.

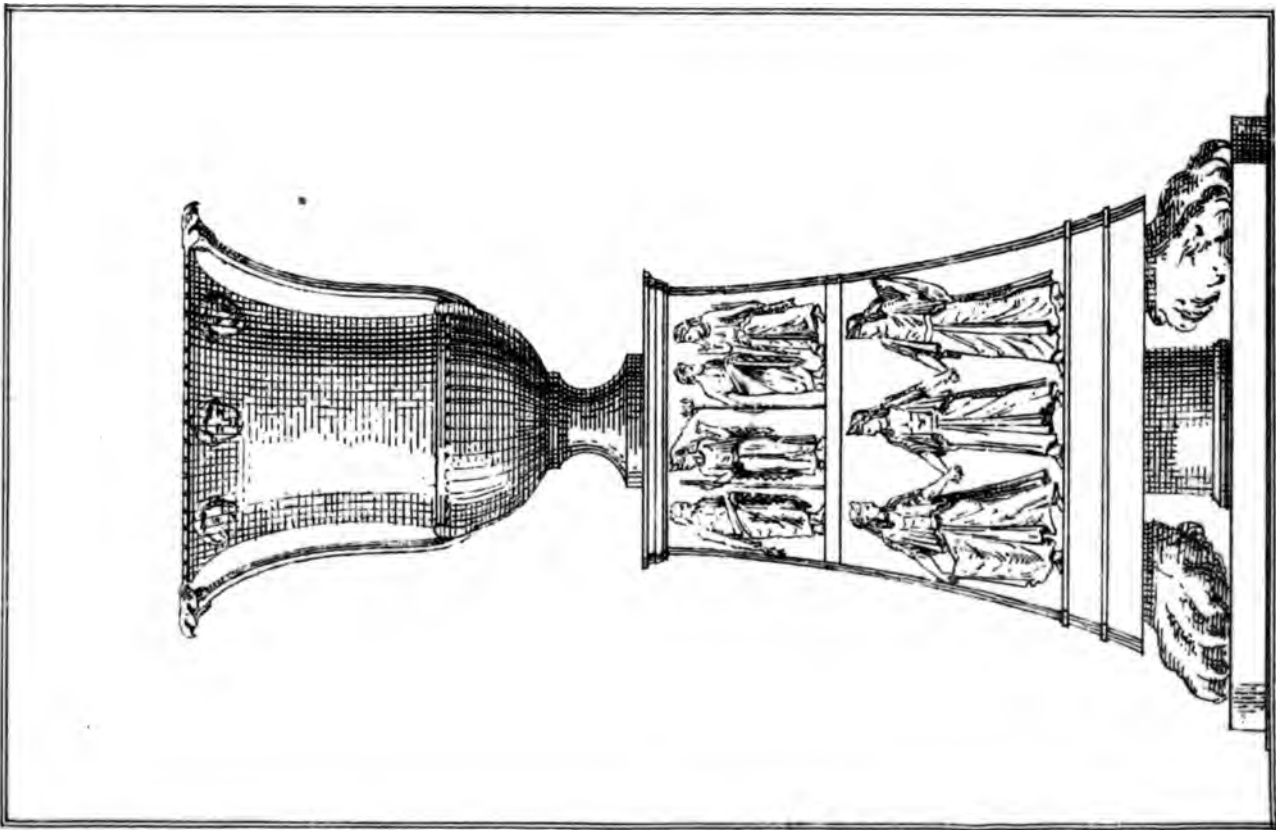
Sol \odot Isaiah xxx. 26.

Genesis xlvii. 4 with Ezek. xlviii. 1-9, and Isaiah xxx. 26.	Friday	\mathfrak{q}	\mathfrak{q}	\mathfrak{d}	\mathfrak{h}	\mathfrak{z}	\mathfrak{f}	Tuesday
	Saturday	6	4	2	7	5	3	Wednesday
	Sunday	7	5	3	1	6	4	Thursday
	Monday	1	6	4	2	7	5	Friday
	Tuesday	2	7	4	3	1	6	Saturday
Genesis xlvii. 4 with Ezek. xlviii. 1-9, and Isaiah xxx. 26.	Wednesday	3	1	6	4	2	7	Sunday
	Thursday	4	2	7	5	3	1	Monday
	Friday	5	3	1	6	4	2	Tuesday
	Saturday	6	4	2	7	5	3	Wednesday
	Sunday	7	5	3	1	6	4	Thursday
	Monday	1	6	4	2	7	5	Friday
	Tuesday	2	7	5	3	1	6	Saturday

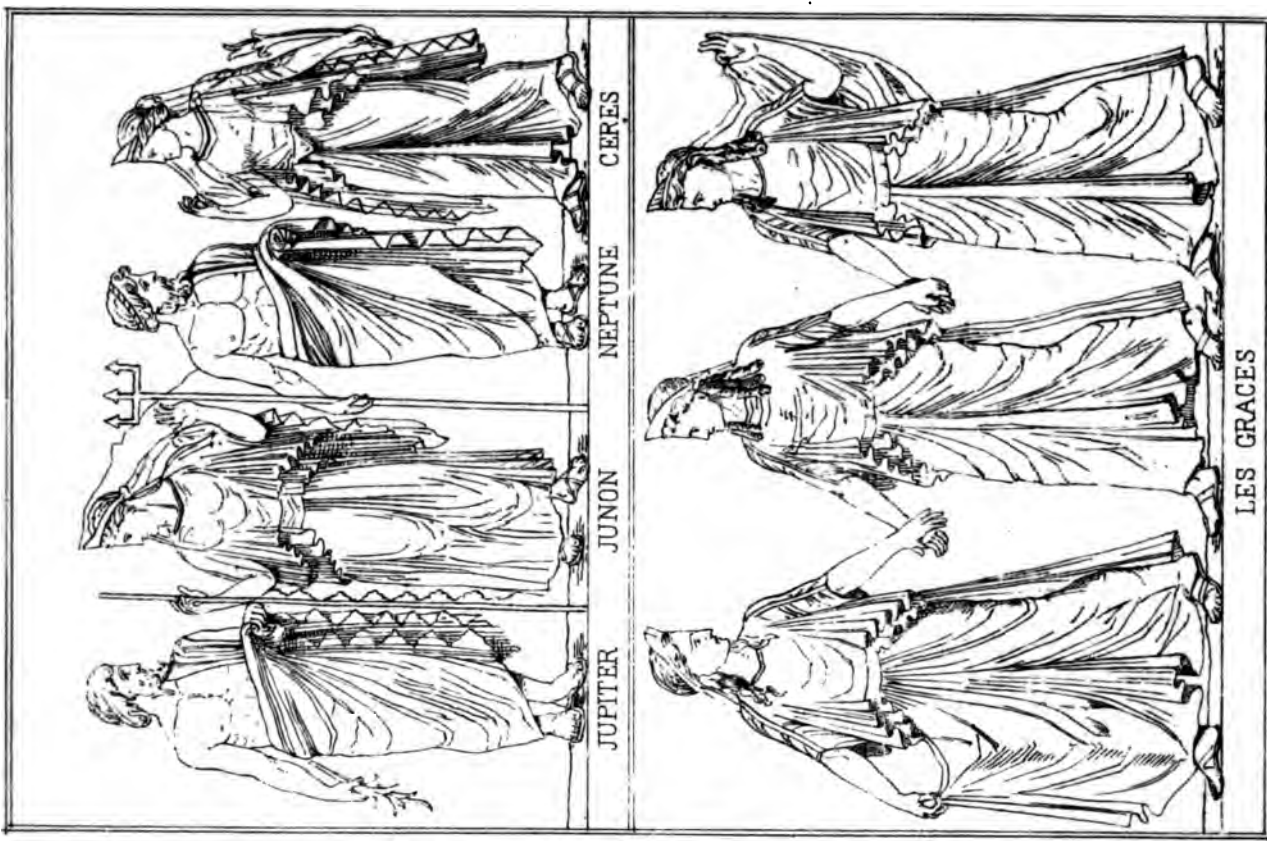
Here we have Venus to Mars in the Sun's South Declination, when his North Declination dated its beginning typically from Wednesday to Mercury then in attendance on the Sun instead of Venus.

This may possibly refer to Venus being sometimes a morning, at others an evening star.

We must here remember that they who dedicated Thursday to Jupiter for the first day of the week to the *moons' descending node for Evening before morning began their reckoning for Thursday from Wednesday Evening*. Similarly, the Jews began their Saturday's Sabbath from the *Friday Evening*; and the Mediæval Christian Church began the Lord's Day, which they dedicated to the Sun, as to Christ, man's SUN of Righteousness, from *Saturday Evening*. This may explain its selection of Wednesday, Friday, and Saturday, for its *Ember days* to mark the beginning of their typical and prophetic time from descending light to the moon's descending node for the four seasons of the year.

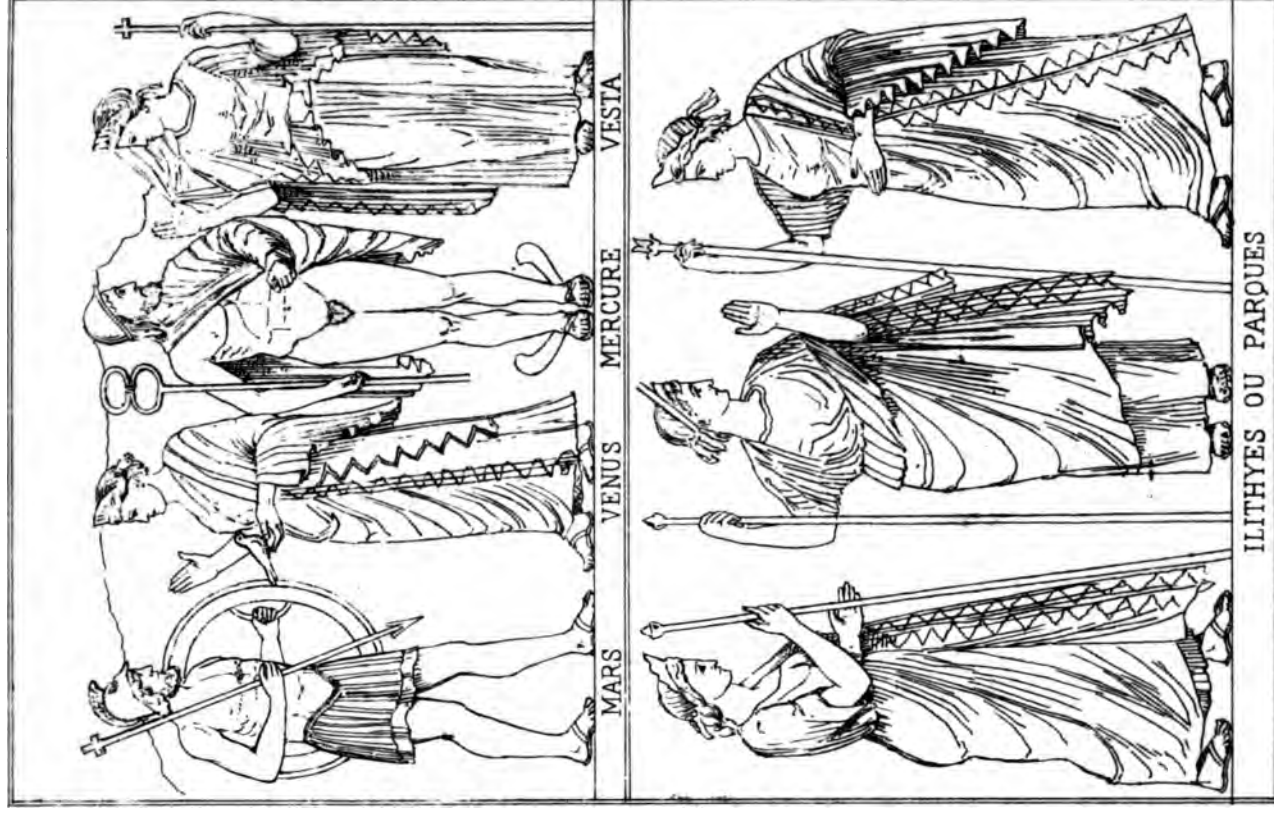
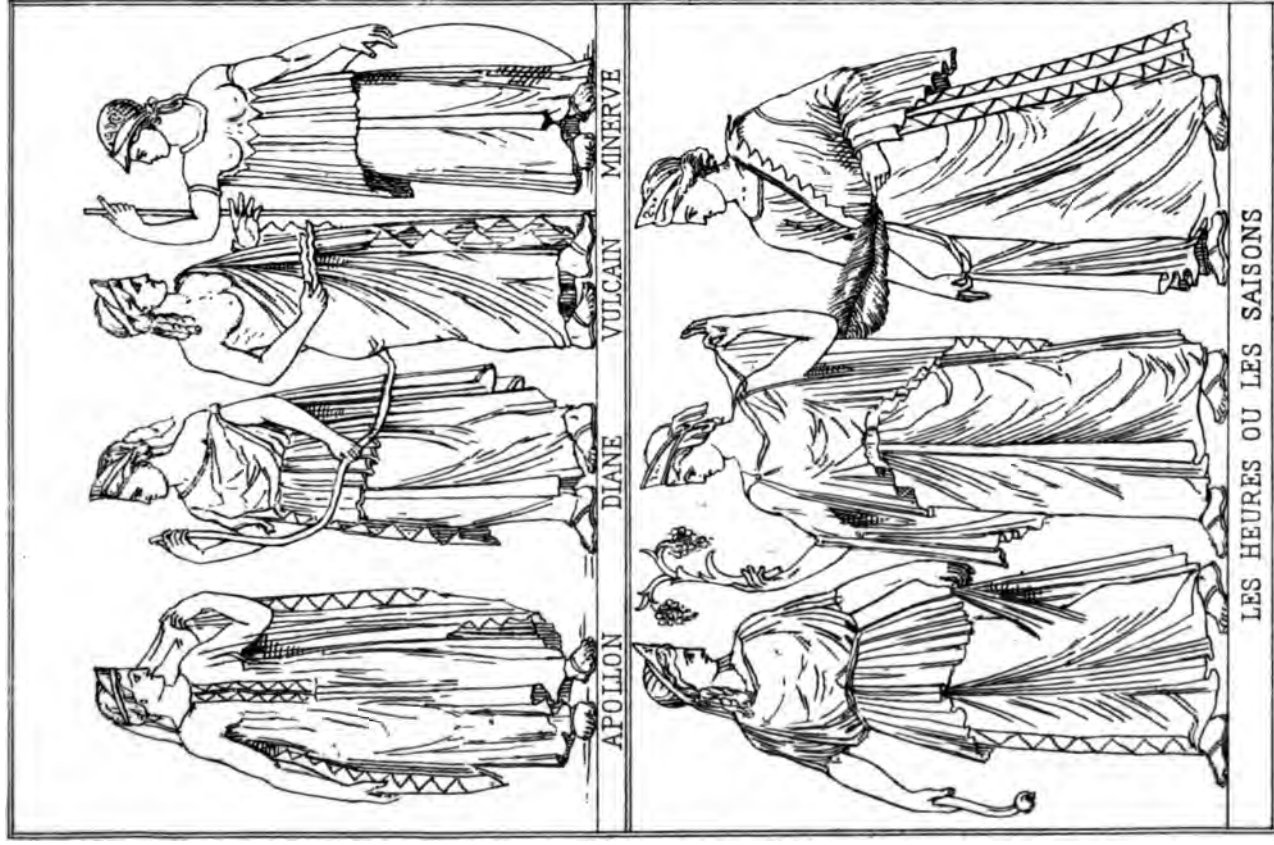


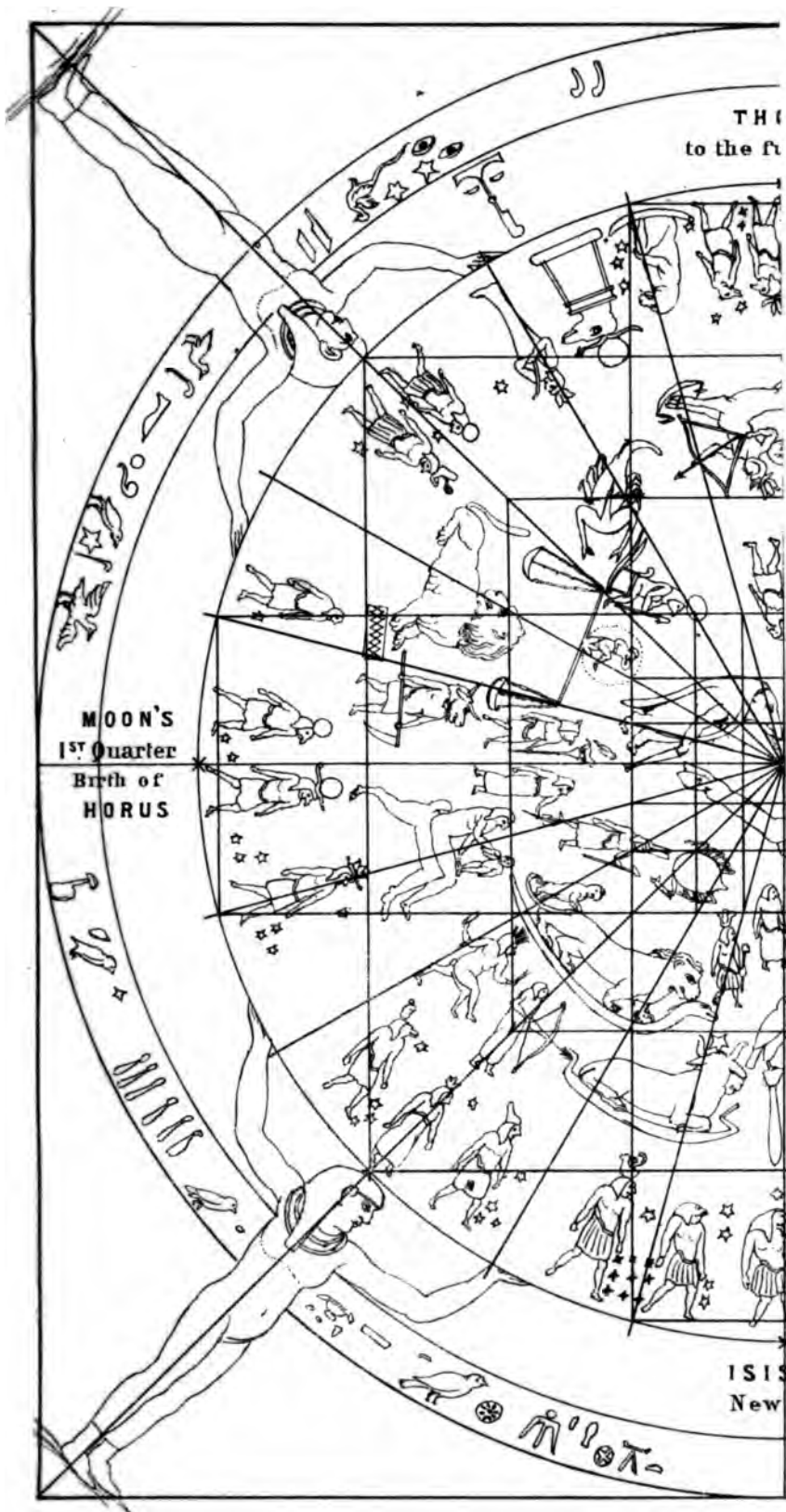
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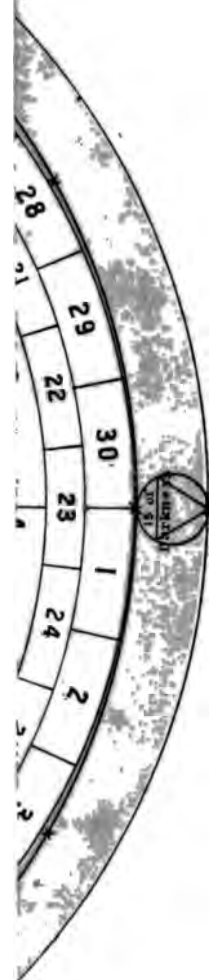
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THE OLD YEAR OF 3 SEASONS COMPARED WITH THE MONTH OF 3 WEEKS





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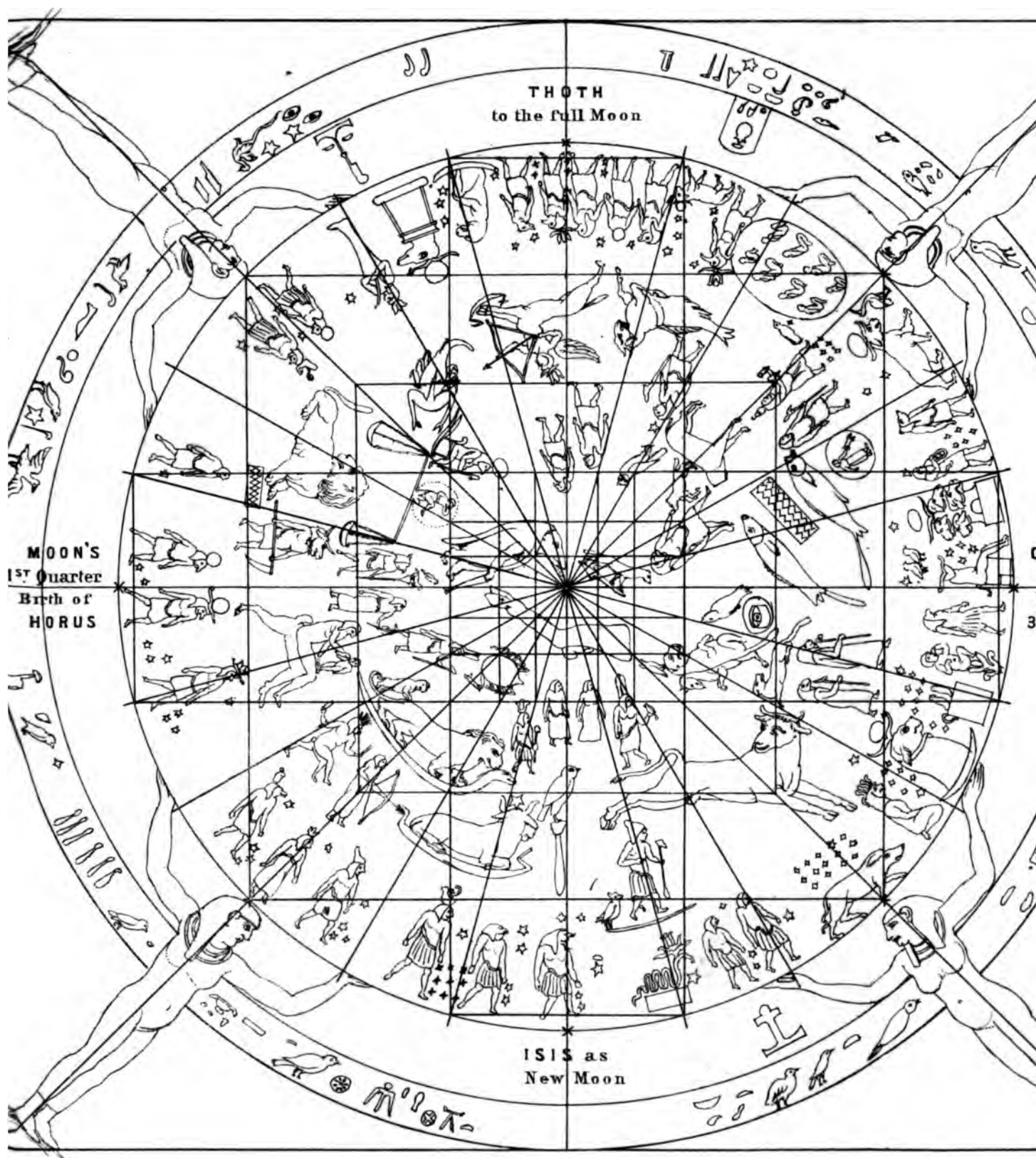


ANALYSI *Planisphere taken from*

Symbolising the relation of the Circle to the Square; as "quadrilateral in

Compare Faber's *Origin of Idolatry*, vol ii, p. 167, with ploughed with fire-breathing bulls, and sowed with dragon's Cycle of the Solar year in its relation to their diurnal arc, on t

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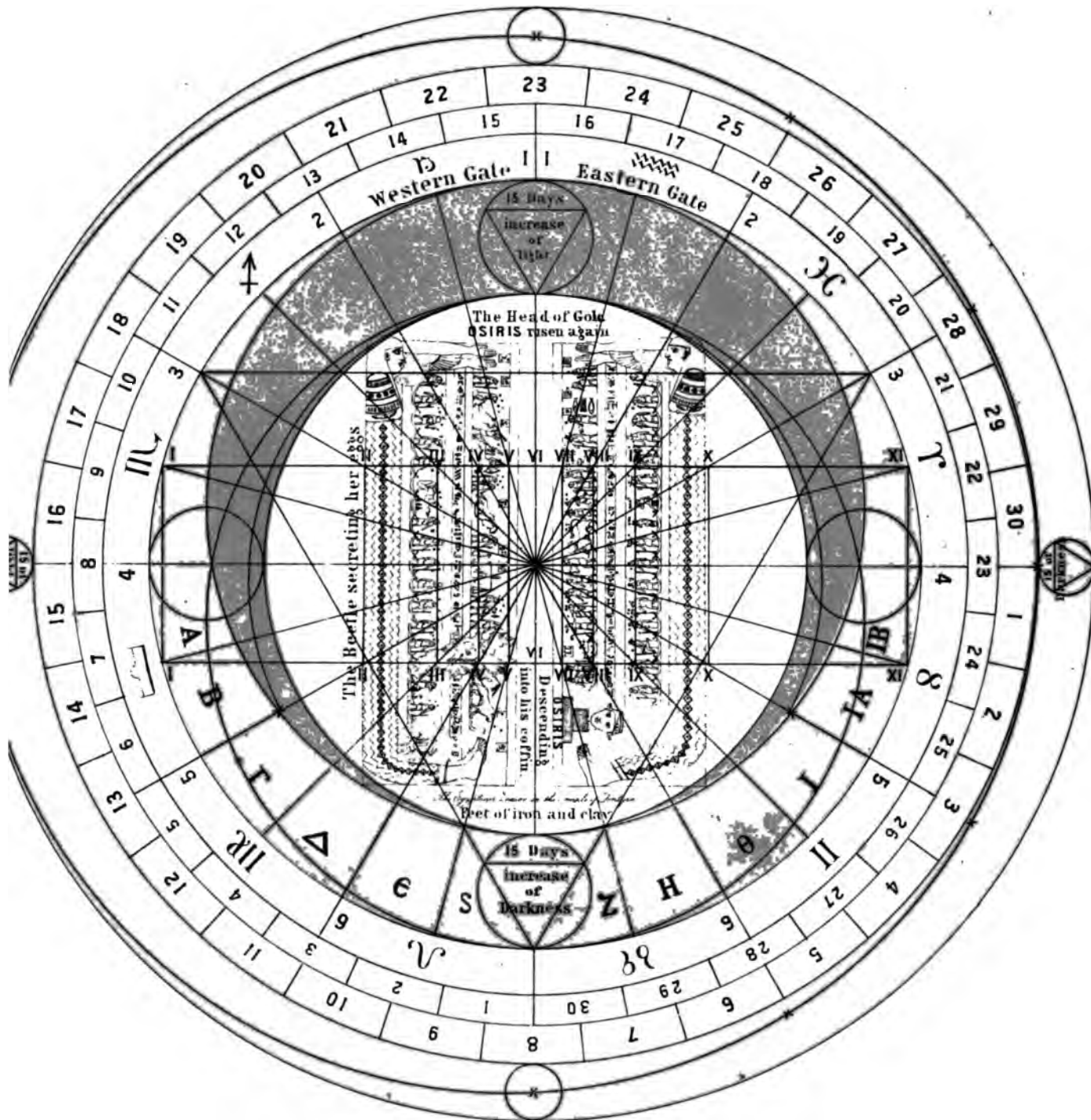


ANALYSIS OF THE
Planisphere taken from the Temple of Tentyra.

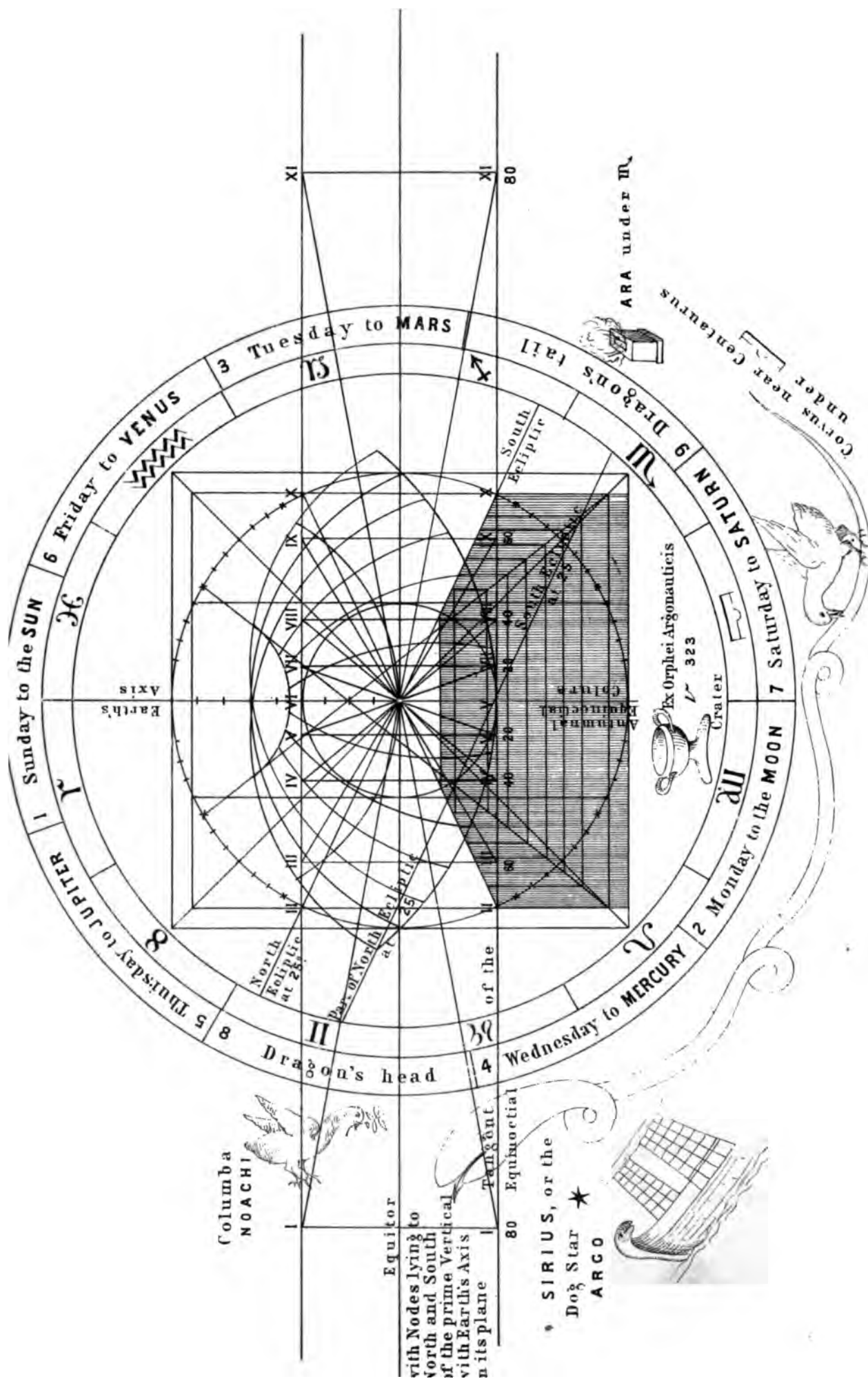
Symbolising the relation of the Circle to the Square; as "the Island" of the Mysteries, "with a strong door and quadrilateral inclosure."

Compare Faber's *Origin of Idolatry*, vol. ii, p. 167, with the four-furrowed inclosure sacred to Mars, which Jason ploughed with fire-breathing bulls, and sowed with dragon's teeth.—*Apollonius Rhodius*, lib. iii, v. 1344-1358. The Cycle of the Solar year in its relation to their diurnal arc, on the east and west dialling of the ancients.

The colossal image of four metals in Nebuchadnezzar's Dream, as a symbolism for *the typical and prophetic chronology of the ancient Orientals*; numbering *four human eyes to one divine age* of solar and lunar light, in the ratio of $1 + 2 + 3 + 4 = 10$ days, months, or years, &c. Thus, the lunar year of 10 months in the Noah's Ark Symbolism + the 60 days' reign of Osiris, give the 360 days of the old solar year.



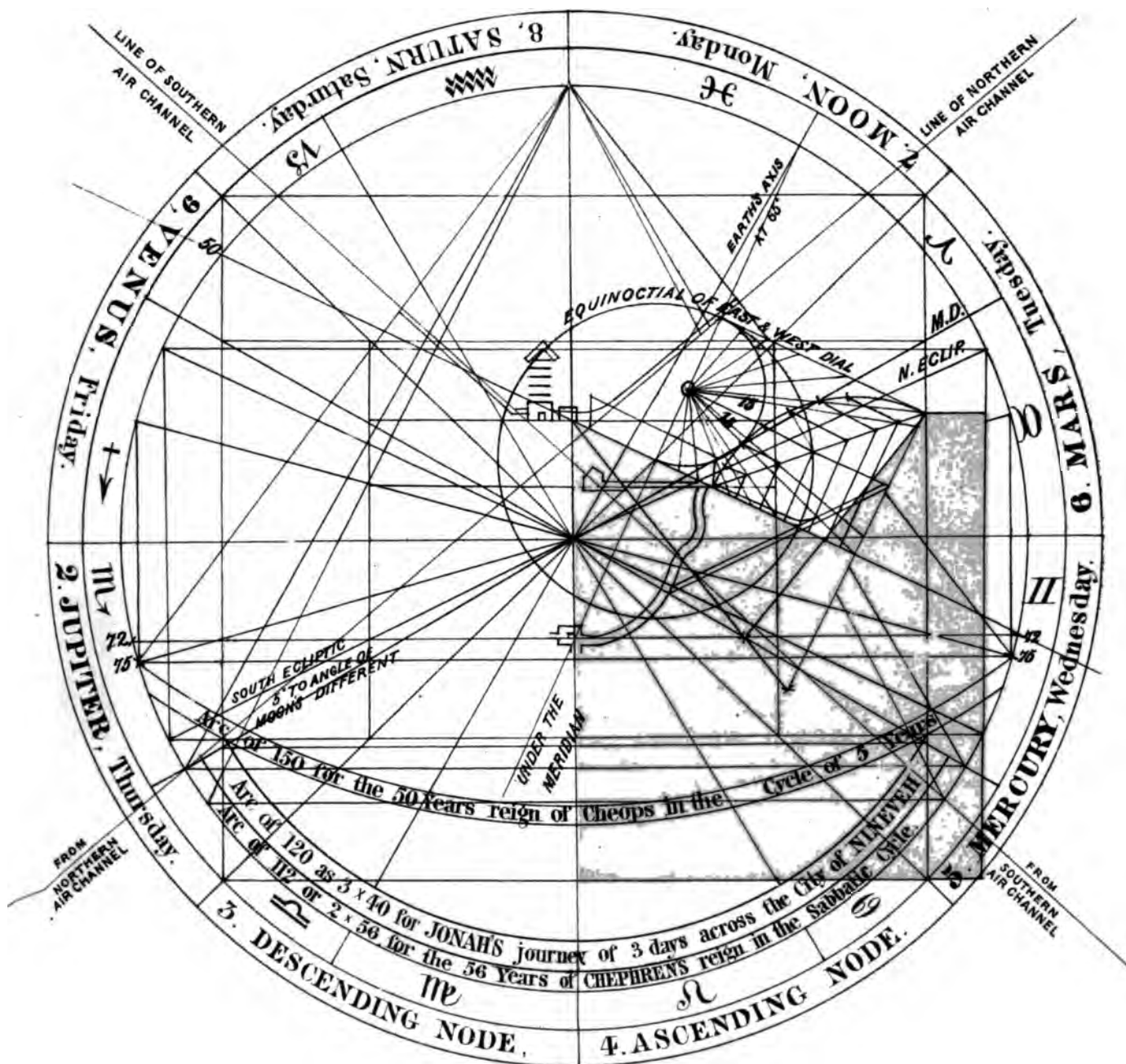
N.B.—The Greek characters mark the relation of the above symbolism to the structure of the Alexandrine, or Greek-Egyptian Dial. The position of A symbolises the beginning of the diurnal arc, in its relation to the cycle of the solar years, as beginning from the full moon of the vernal equinox, when beginning between α and η.

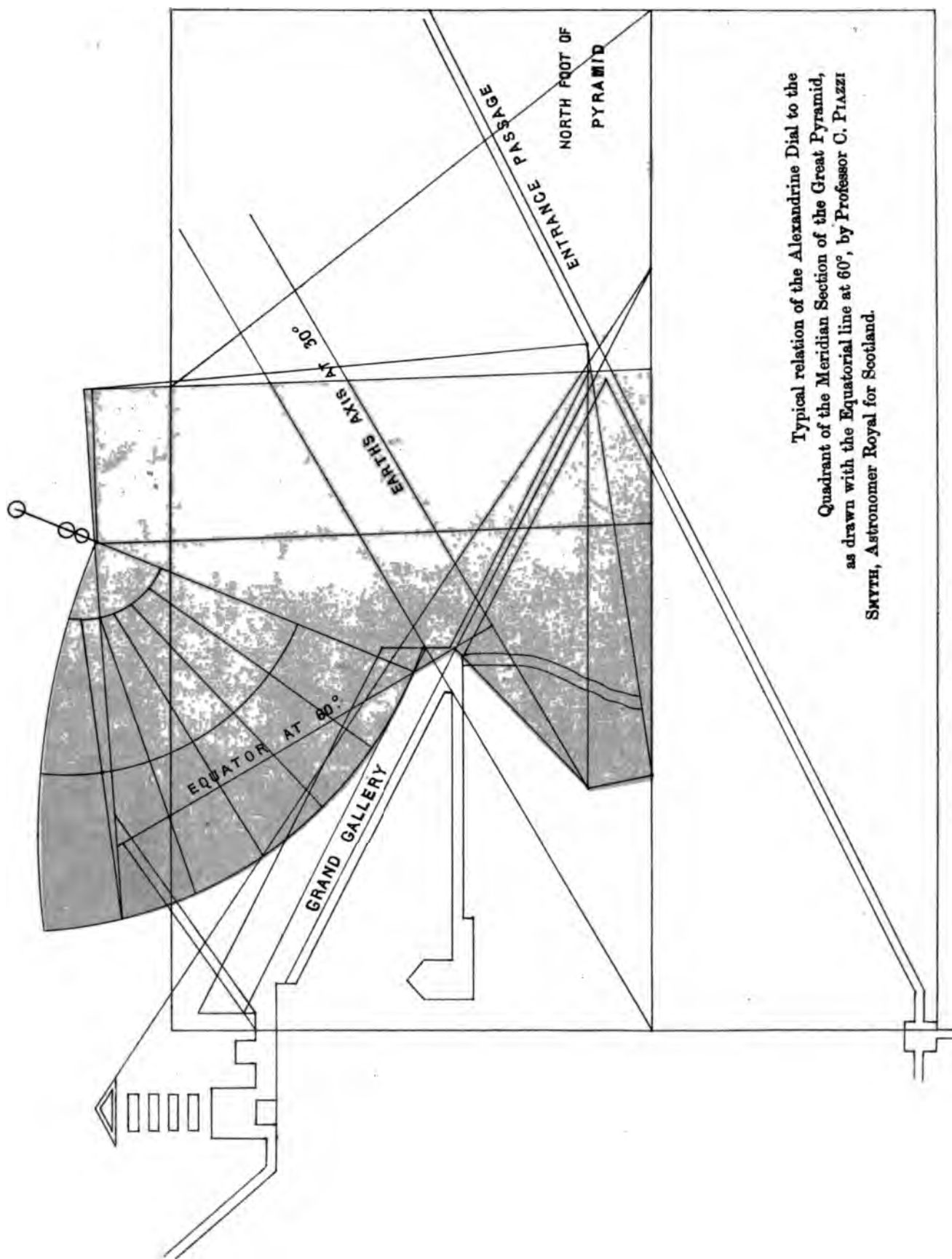


The days of the week are here given to the signs of the zodiac as on the Indian zodiac in the *Encyclopaedia Londinensis*, which seemingly refers to the oldest solar year of seasons in its relation to their east and west dialling. For that gave the western hemisphere to the north, for the south of the dial, and the eastern hemisphere to the south, when the north was given to God, and the south (as a draught house, 2 Kings 1, 29, in the dragon symbolism for the nodes—compared with the late Emperor of Jos), to the lower regions of this typical instruction respecting the true light of man's life in God, as revealed under a mystery of godliness (i.e., under a mystery of the and human nature combined in Christ).

numbered to the 7th hour on an East or West Dial. In each case, however, its elevation above the horizon is equal

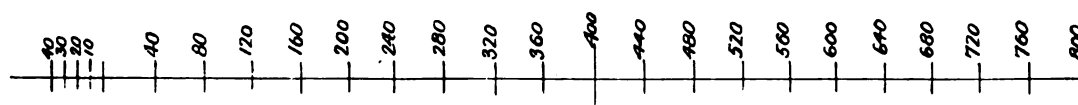
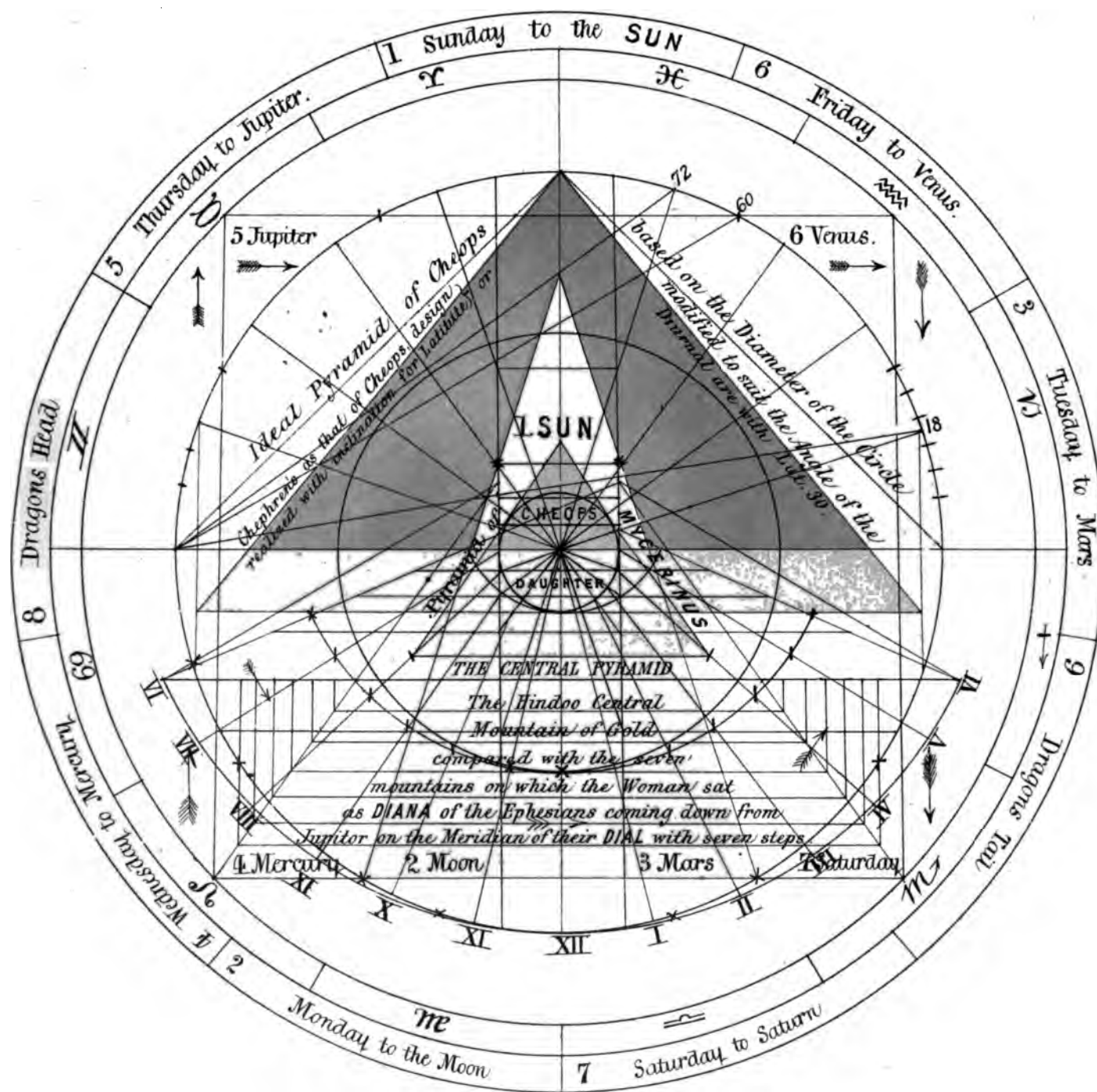
The Symbolic Structure of the Great Pyramid, compared with that of
the Greek-Egyptian Dial with Steps.

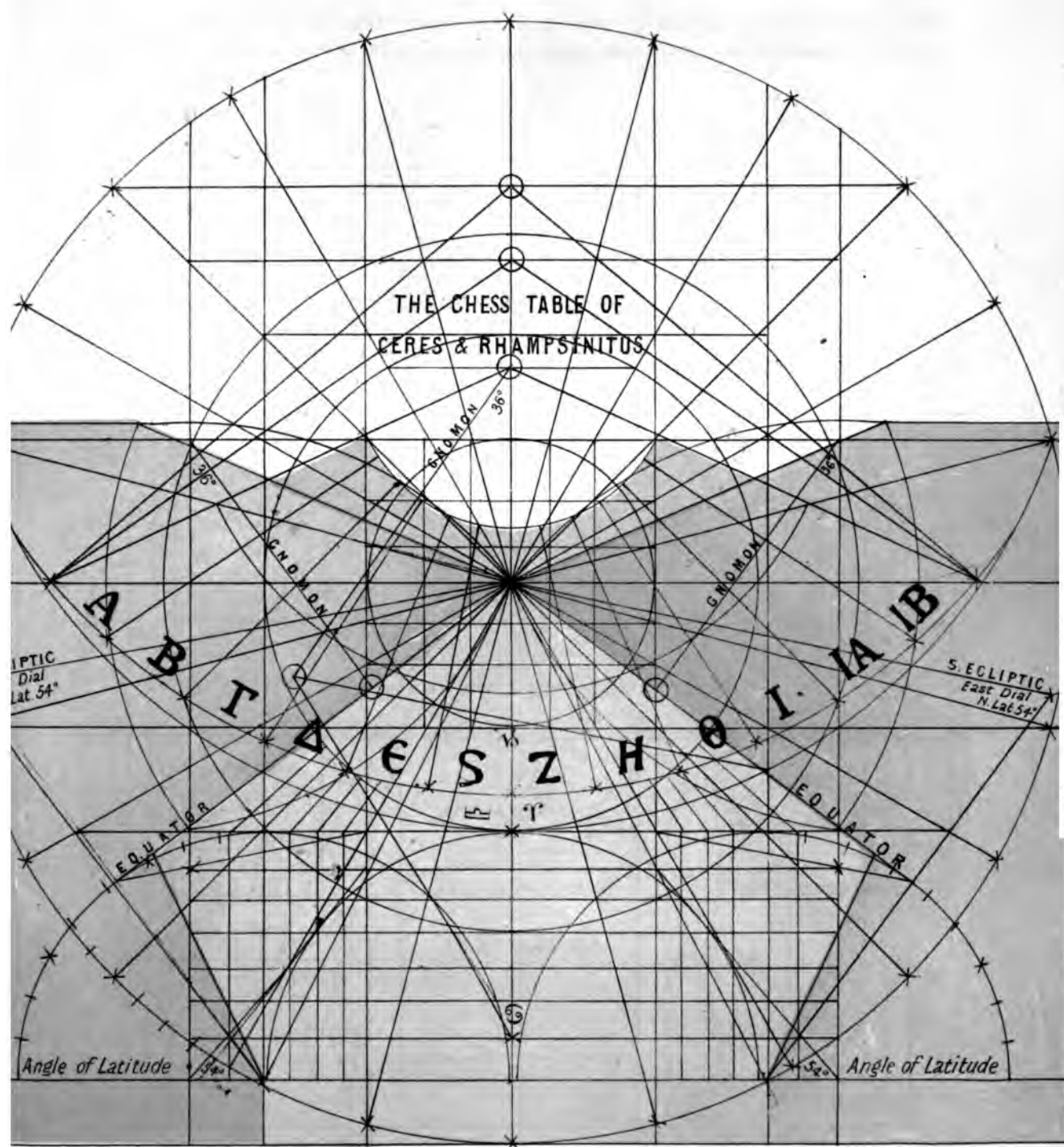




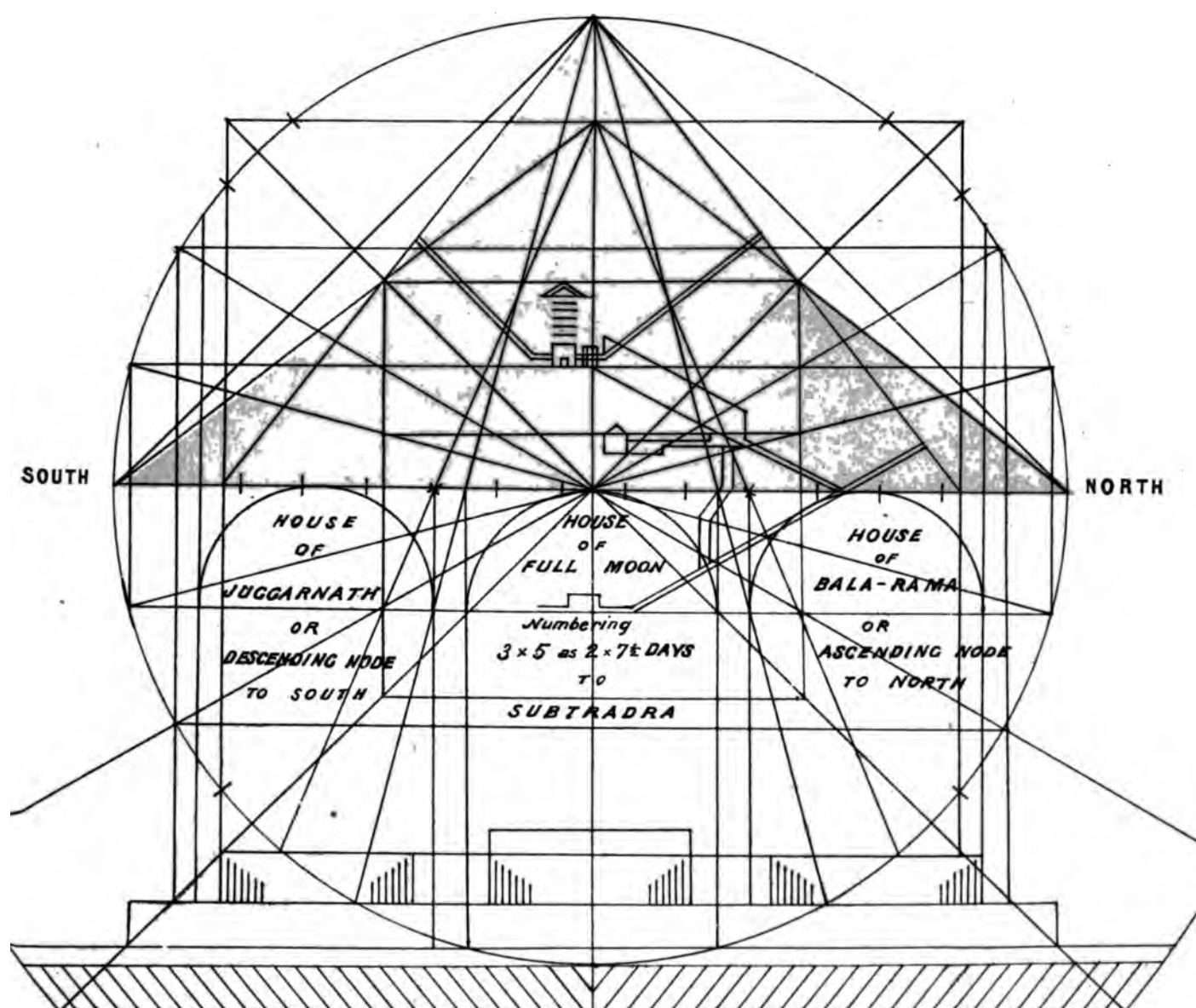
Typical relation of the Alexandrine Dial to the
 Quadrant of the Meridian Section of the Great Pyramid,
 as drawn with the Equatorial line at 60°, by Professor C. PIAZZI
 SMYTH, Astronomer Royal for Scotland.

The GREEK EGYPTIAN DIAL, with Steps, in its probable relation to a Typical Design in the Pyramid Building. Compare with this Symbolism the Metaphor of Rev. xii. 1, xix. 17, as contrasting the ADVENT of the SUN of RIGHTEOUSNESS with a darkening of the Heavens of the then dominant Idolatry of Baalism.





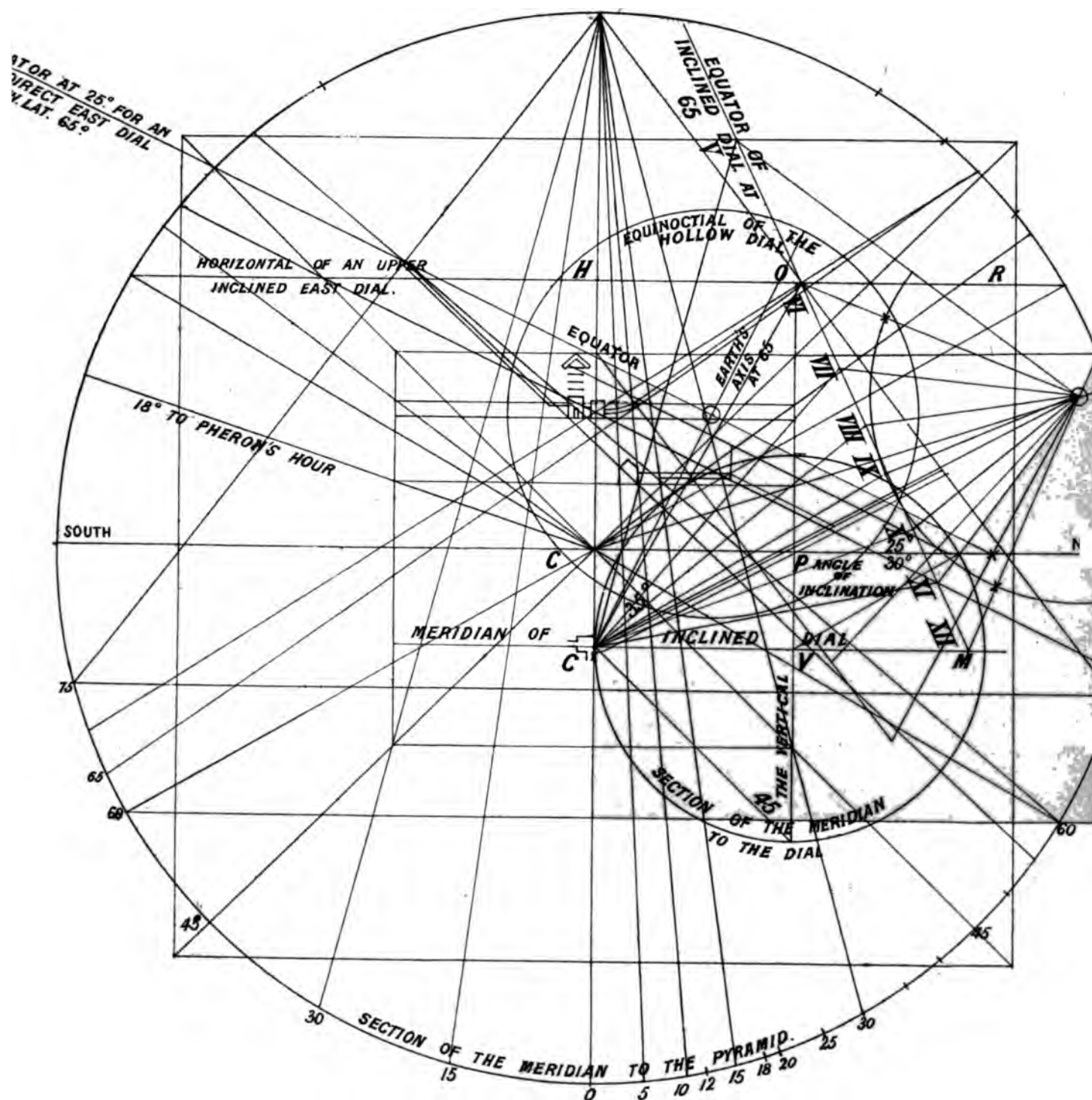
The Typical Structure of the Great Pyramid, as a Symbolism from the East and West Dialling of the Ancient Orientals; also for the Full Moon between her nodes, when lying north and south. See "Colman's Hindu Mythology."

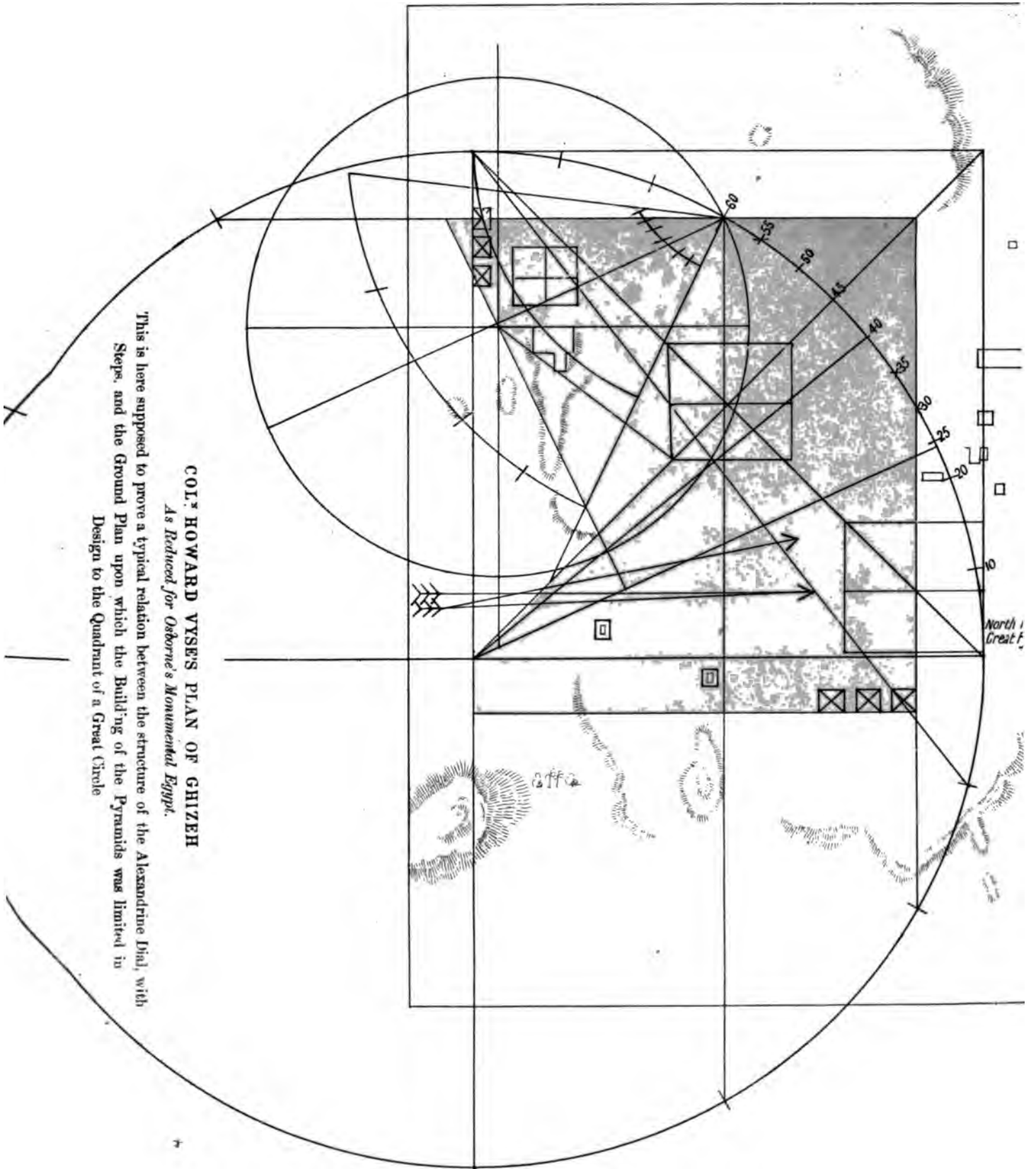


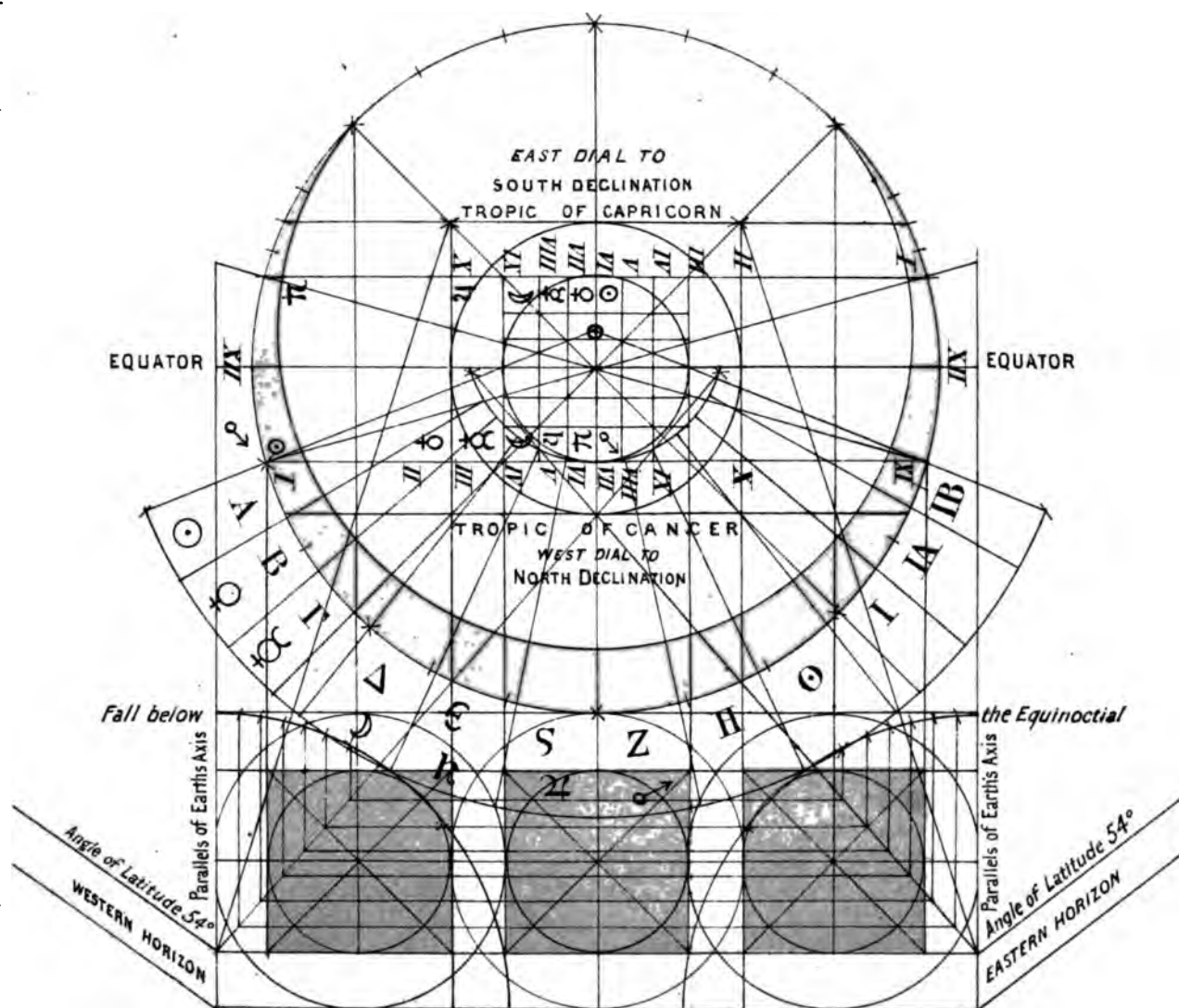
Compare Luke xii. 52, on the house of five divided against itself, as by the typical worshippers of God, according to the law of His Sabbath, against the idolaters and their cycle of five years.

THE PYRAMID SYMBOLISM

Adapted to the structure of the Alexandrine or Greek-Egyptian Dial with Steps (considered as an Upper Inclined East Dial for N. lat. 65, with angle of inclination 30°), on the scale of the model made from the original by Mr A. Hayes of the British Museum.





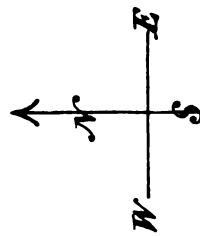


THE DIAGRAM REFERRED TO IN CONCLUDING REMARKS.

Compare the squares described about the three small circles on the steps, with the three small Pyramids between the same parallels in the plain of Ghizeh.

Fig. 2.—The third Pyramid, or that of Mycerinus, with other three small Pyramids between the same parallels, on its southern front.

This forms a symbolism for the diurnal arc of an East and West (compared with a Horizontal) Dial, given to the Moon between her nodes. As to "the head and tail of the dragon," by which the Orientals meant the intersection of two circles,—viz., that of the Ecliptic by the Moon's orbit,—see Blundevil, as quoted in page 5 of my Notes on APHOZ'HIS. (Compare the *penthouse roof*, with its *double apex*, in the symbolic idol of Subhadra, between her two brothers, Juggarnath and Bala Rama, as copied from Coleman's Hindu-Mythology.) These symbolisms show how the Orientals anciently divided the week of seven days, between her ascending and descending light, to the diurnal arc of ten hours, on the steps of their ancient dialling with steps, as may be seen in the structure of the Alexandrine or Greek-Egyptian Dial with Steps.



For the meridian of the Howard and Vyse, as made to pass through
the centre of the second Pyramid.

Fig 1.

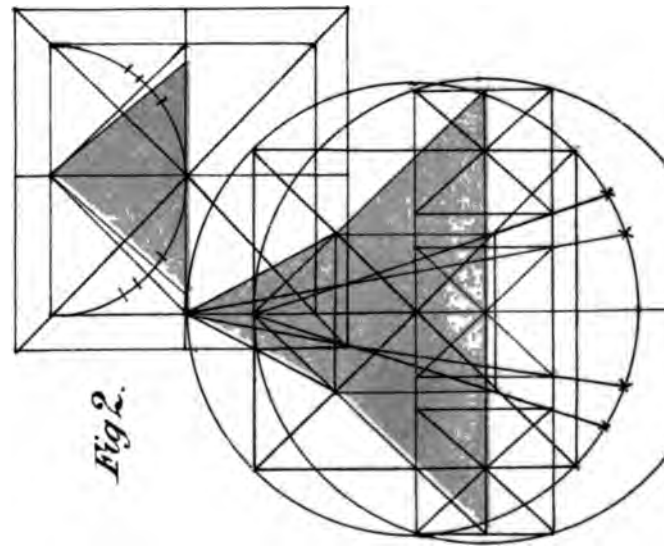
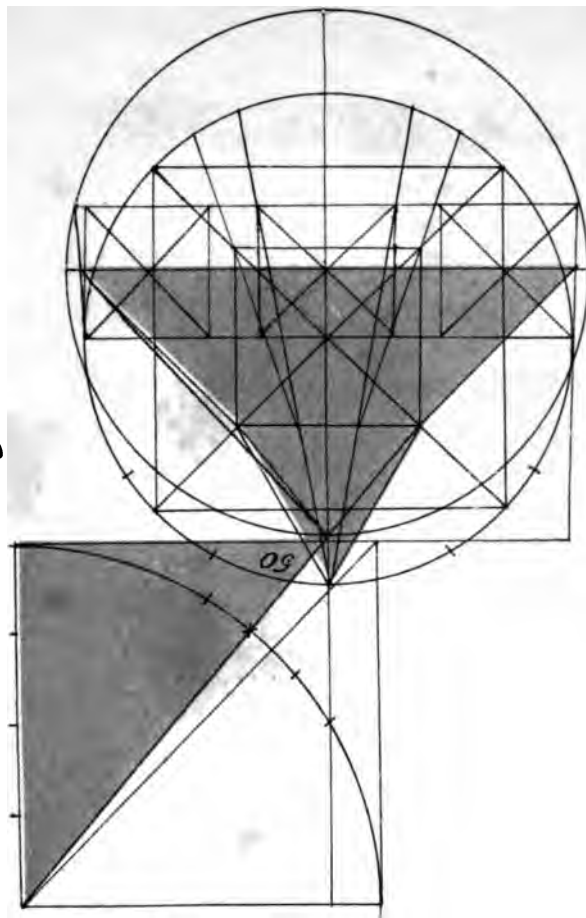
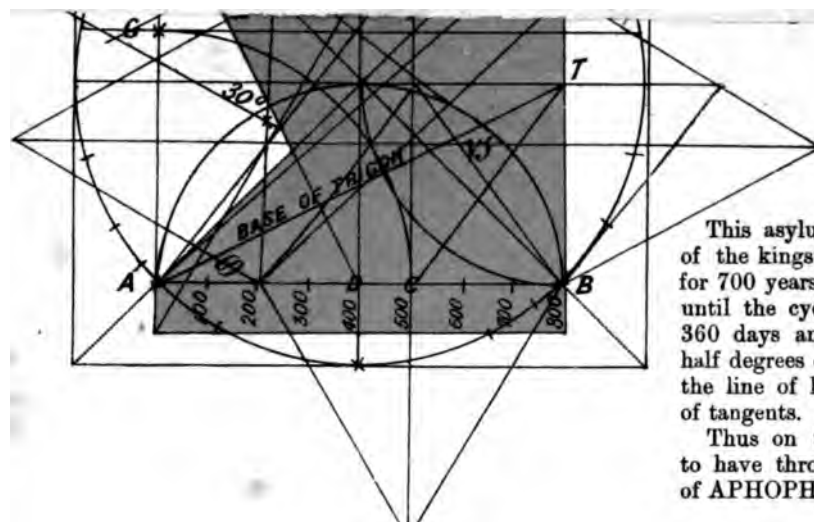


Fig 2.

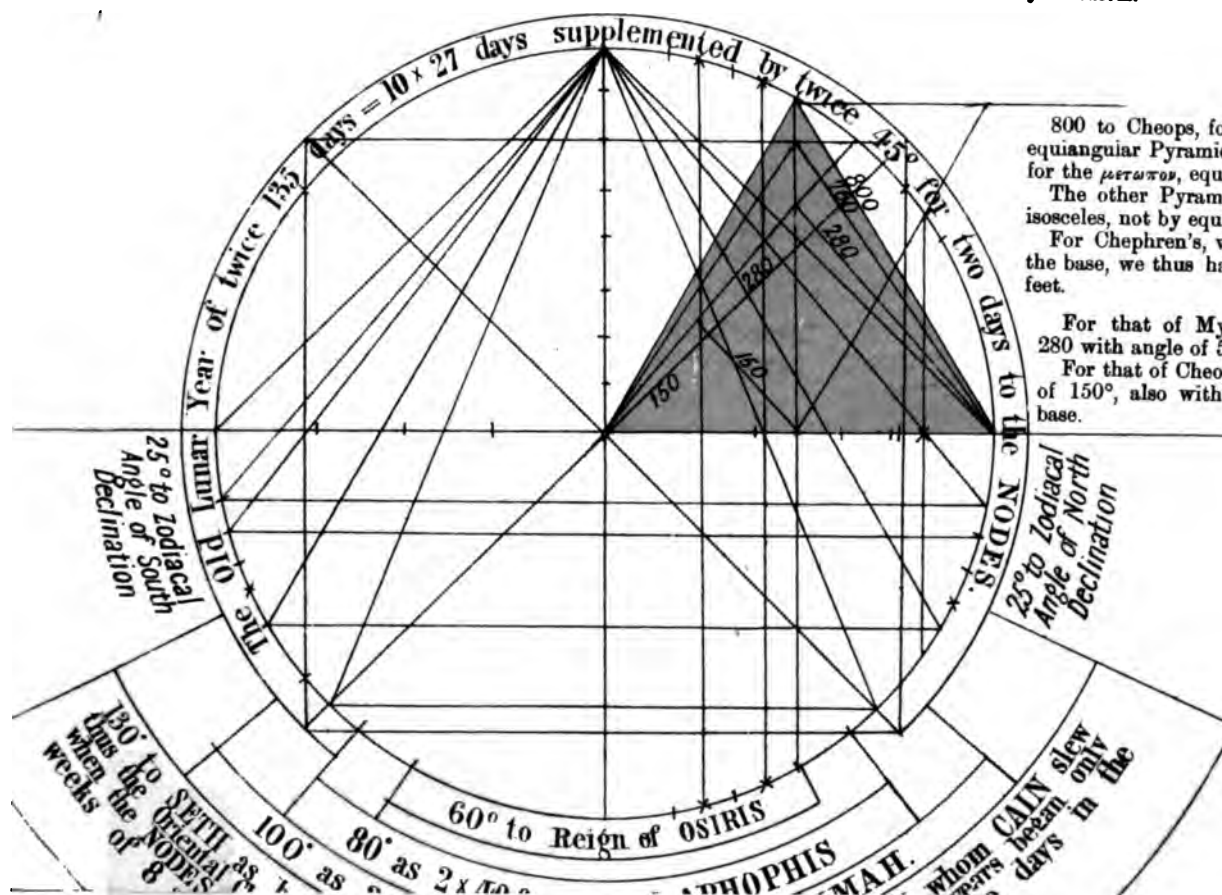
it if Herodotus meant to say that each triangular face had a sloping side equal to its breadth of base, the form would be that of an annilateral and annular triangles and the measurements for these two Pyramids would stand thus :—



This asylum was not found out by any of the kings of Egypt who followed him, for 700 years, until Amasis the Last, viz., until the cycle of the year was complete; 360 days and 360 nights measured 720 half degrees on the equinoctial; and 20 on the line of half tangents are as 10 on that of tangents.

Thus on their Quadrant Dial they seem to have thrown 10° out for 80° , to the life of APHOPHIS.

The symbolic design of the Pyramid builders, traced from the measurements recorded by Herodotus.



800 to Cheops, for an equilateral and equiangular Pyramid, with sloping height for the *peripteros*, equal to its base.

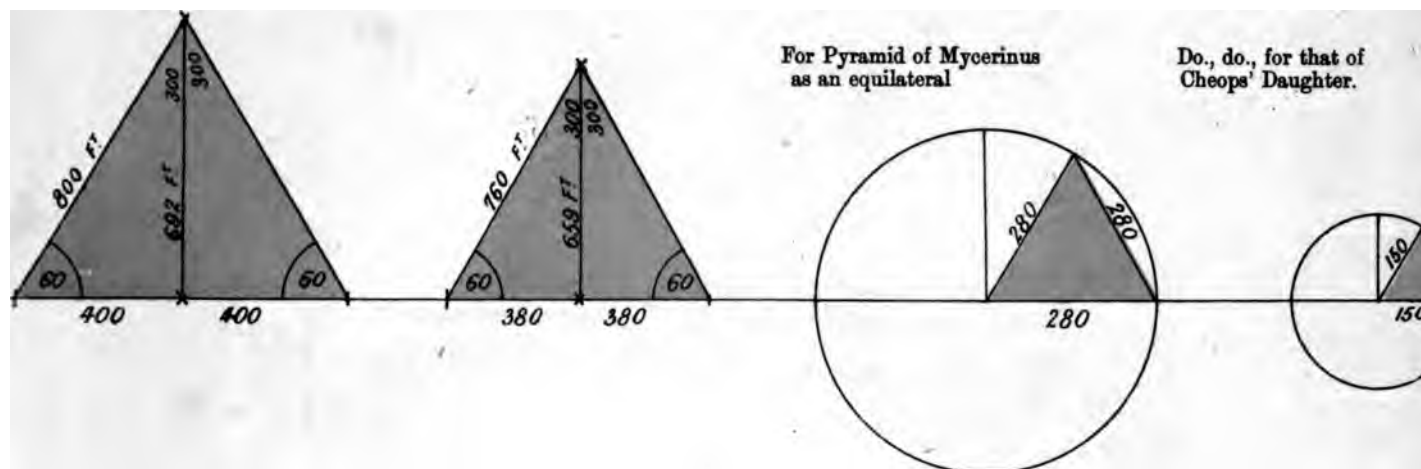
The other Pyramids are measured by isosceles, not by equilateral triangles.

For Chephren's, with angle of 56° at the base, we thus have two sides of 760 feet.

For that of Mycerinus, two sides of 280 with angle of 50° at the base.

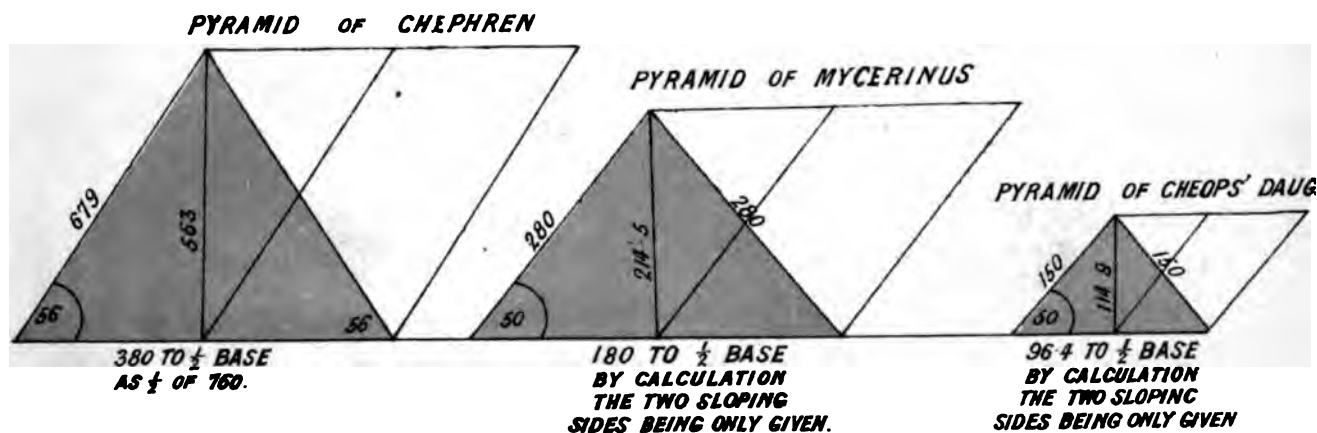
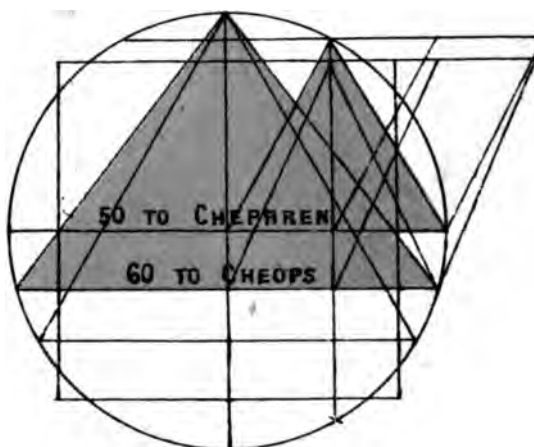
For that of Cheops' daughter, two sides of 150, also with angle of 50° at the base.

But if Herodotus meant to say that each triangular face had a sloping side equal to its breadth of base, the form would be that of an equilateral and equiangular triangle, and the measurements for these two Pyramids would stand thus :—



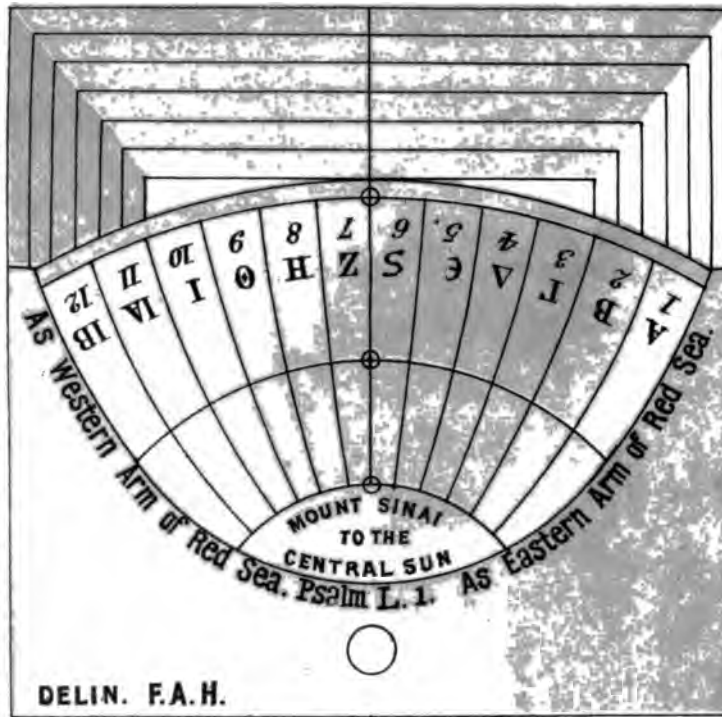
The relation of the Pyramid of Cheops, and his reign of fifty years (with that of Chephren and his reign of fifty-six years), to the equinoctial of the Greek-Egyptian Dial, as a hollow quadrant dial.

Thus the hill on which these two Pyramids were built seems to have symbolised a quadrant of the meridian. Upon such a supposition, we readily perceive a meaning answering to the form of the subjoined diagram. In the words of Herodotus, that the Pyramid of Chephren was built forty feet lower down on the same hill of one hundred feet high; and was to some extent (or proportionately) less in size.

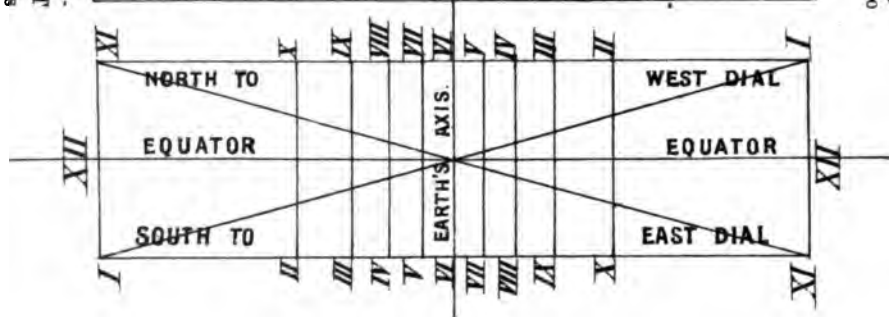


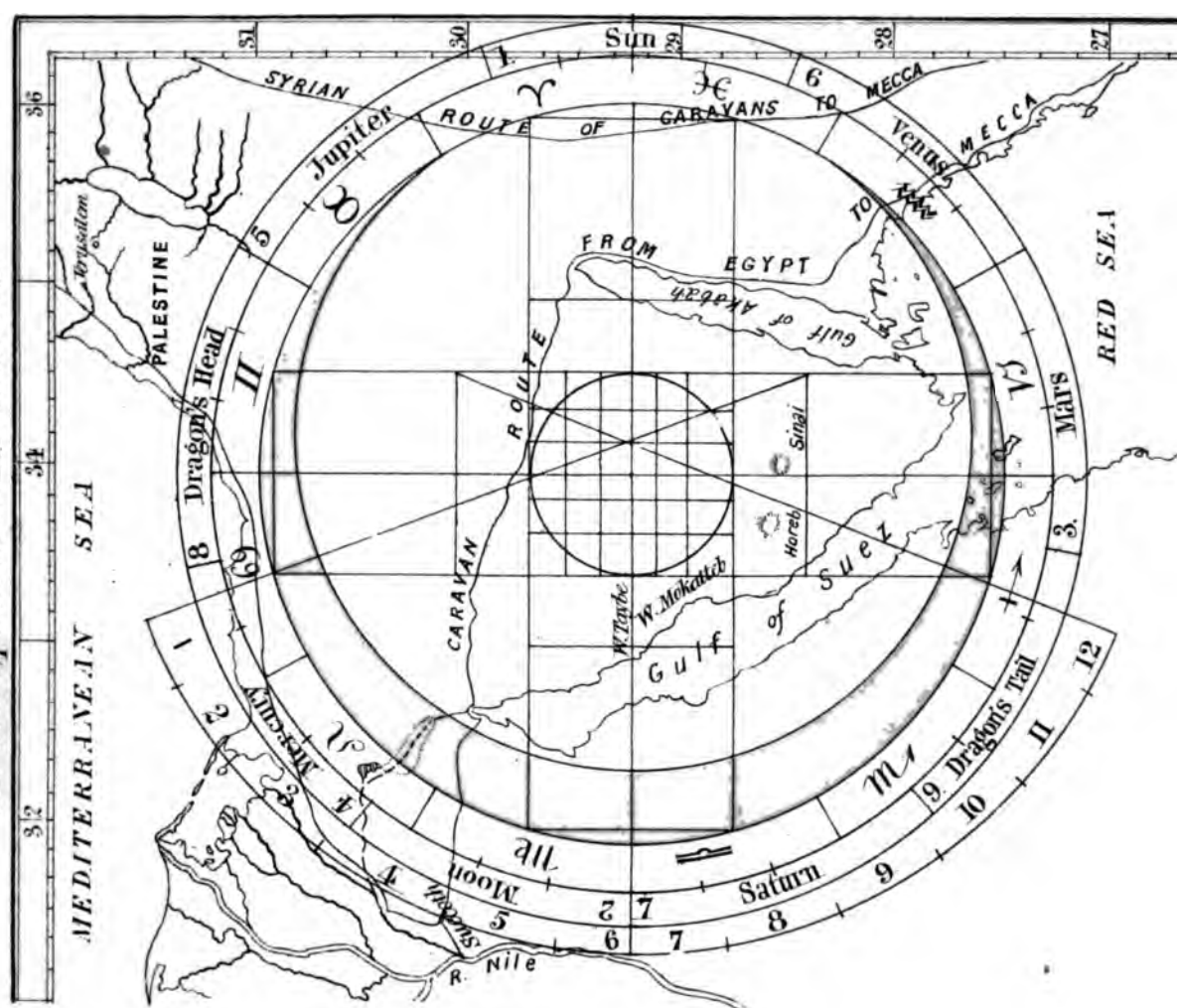
THE TYPICAL FEATURES OF THE EXODUS,
 Illustrated by the Structure of the Alexandrine or Greek-Egyptian Dial.

The hour of XII. to the beginning of Israel's Exodus out of Egypt at mid-night, when the beginning of the diurnal arc was reckoned from the WEST for the evening and morning of the fourth day (Gen. i. 19.) The Argonauts also began their voyage at sunset.



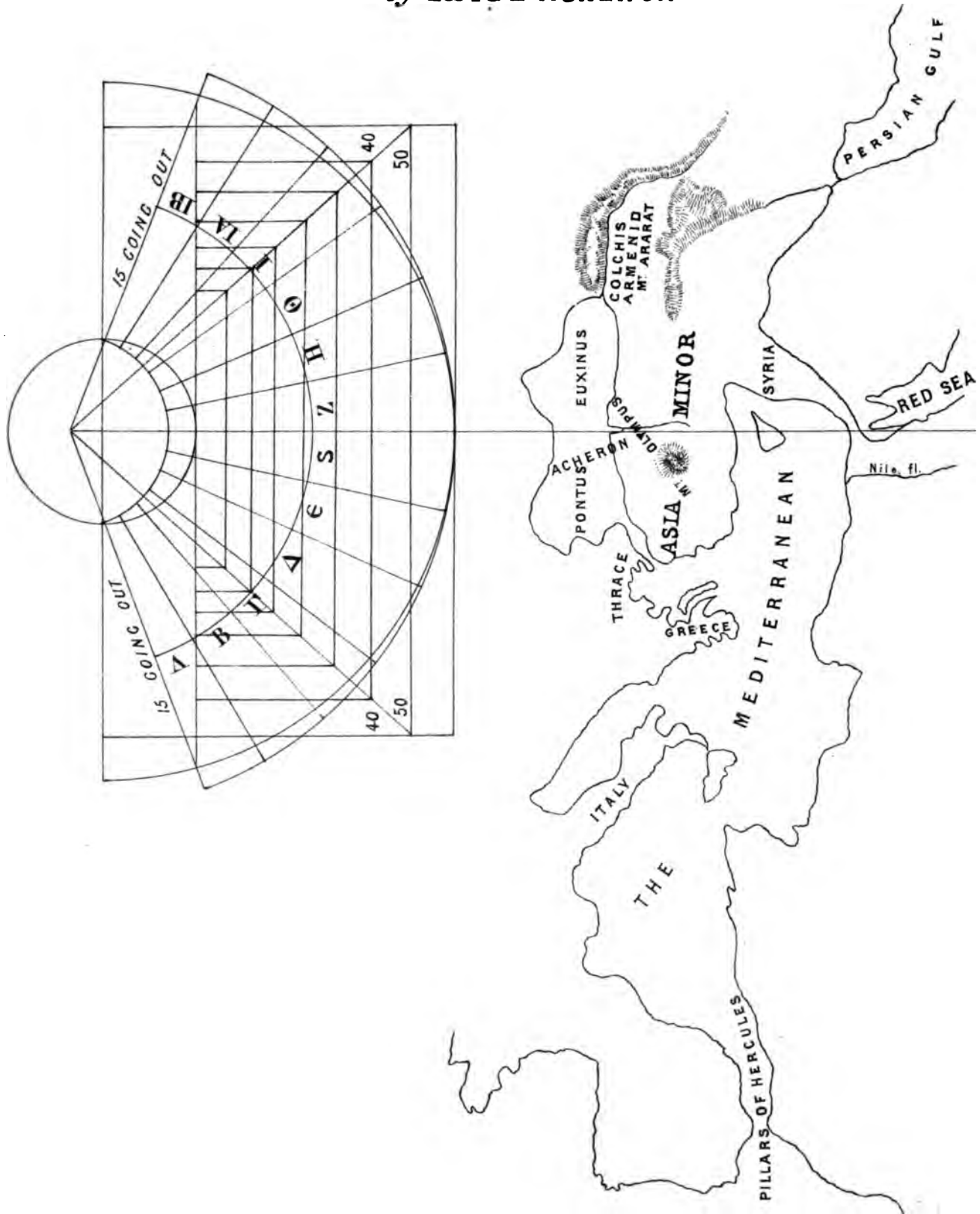
Israel's exit out of the Wilderness of Kadesh (viz., the Kadesh Barnea, or moving sanctuary of God's people, called "*children of the light and of the day*," into the promised land, given eastward to sunrise, after the death of Aaron on Mount HOR.

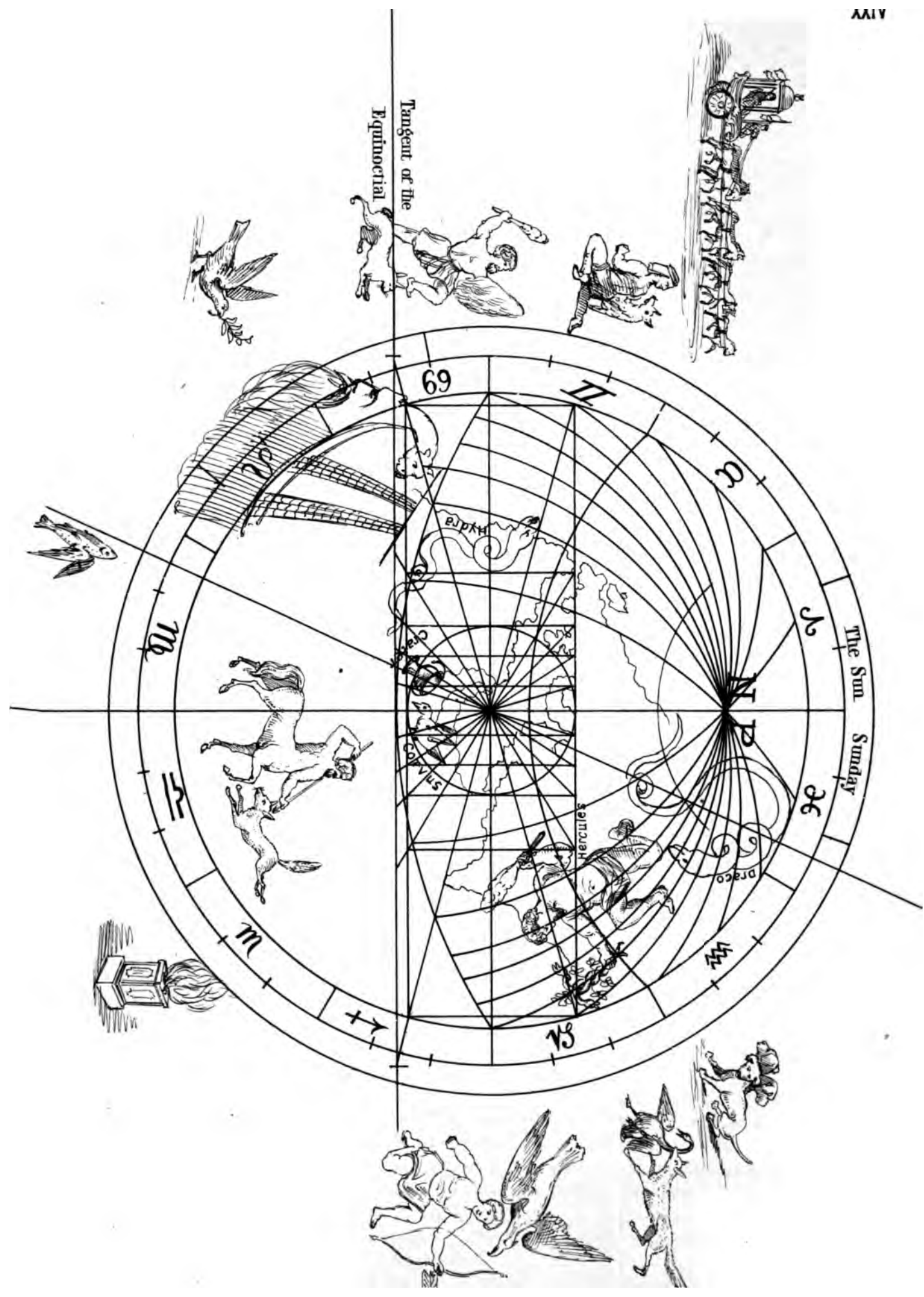




**DAY of Egyptians
beginning at Midnight
Symbolized to the Winter Tropic
as the THOTH, or beginning of their Year**

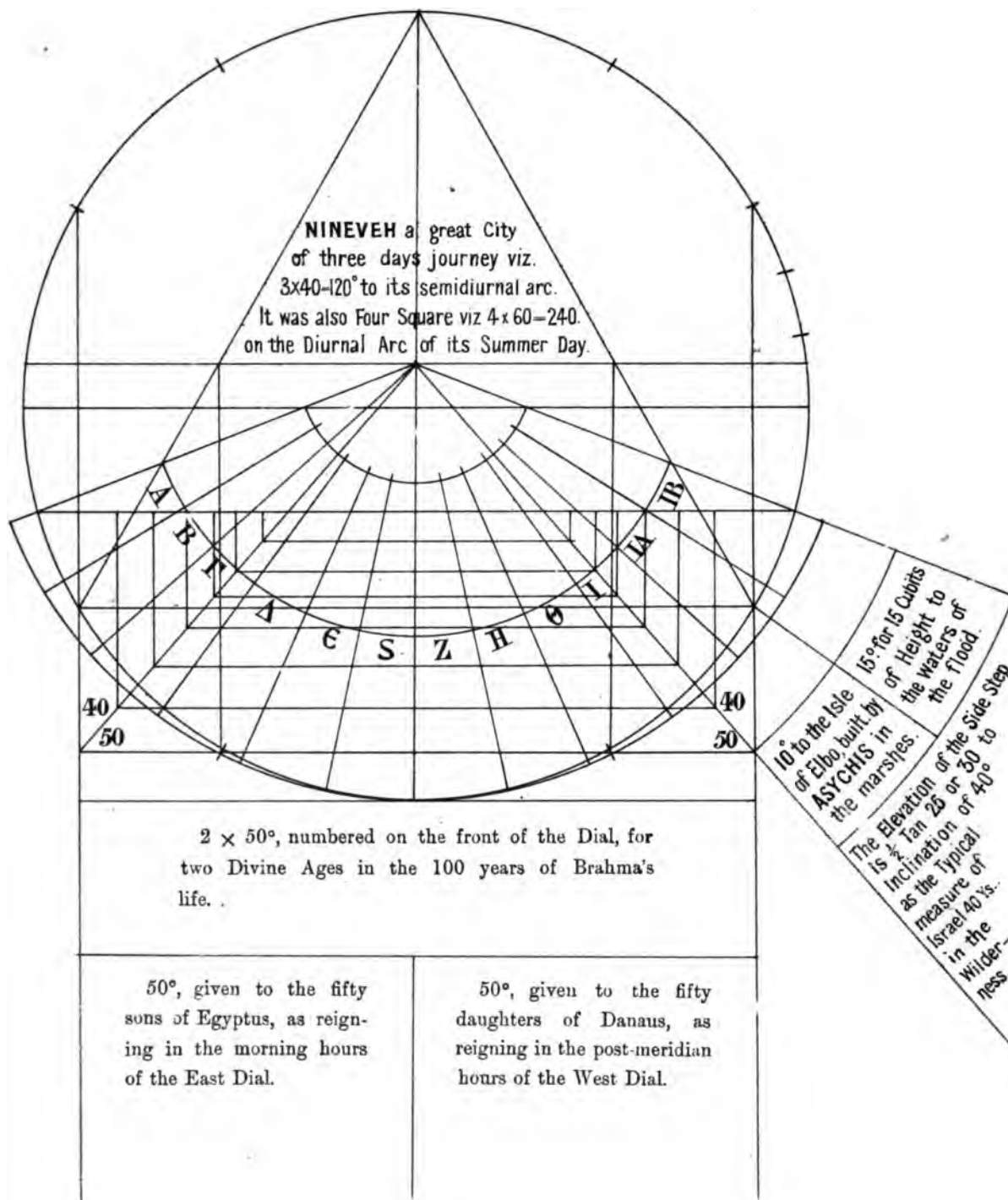
*Descent of HERCULES into HADES
by the river ACHERON*





Tangent of the
Equinoctial





N.B.— $4 \times 60 = 12 \times 20 = 240$.—For four cycles of OSIRIS, in the eight months of the Summer season, when numbering 8×30 , instead of $8 \times 27 = 216$ days, to the reign of the eight oldest gods of Egypt.

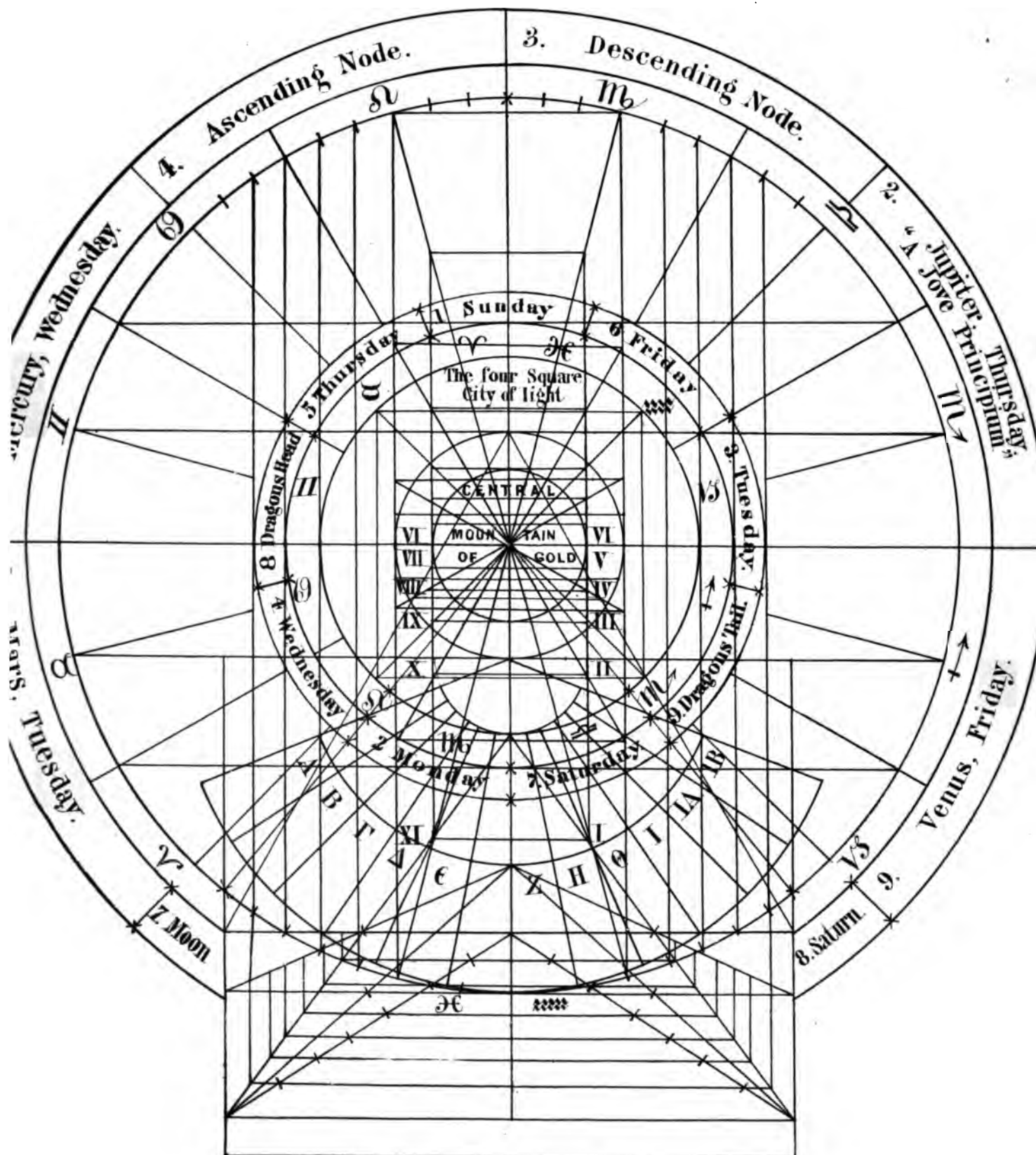
$4 \times 84 = 12 \times 28$.—For the earliest cycle of the twelve gods who followed the previous eight, and whose reign numbered four cycles of Helius.

$4 \times 90 = 12 \times 30$, as 3×120 .—For the old Chaldean solar year of three seasons, divided to the reigns of PAN, HERCULES, and BACCHUS, by the Egyptians.

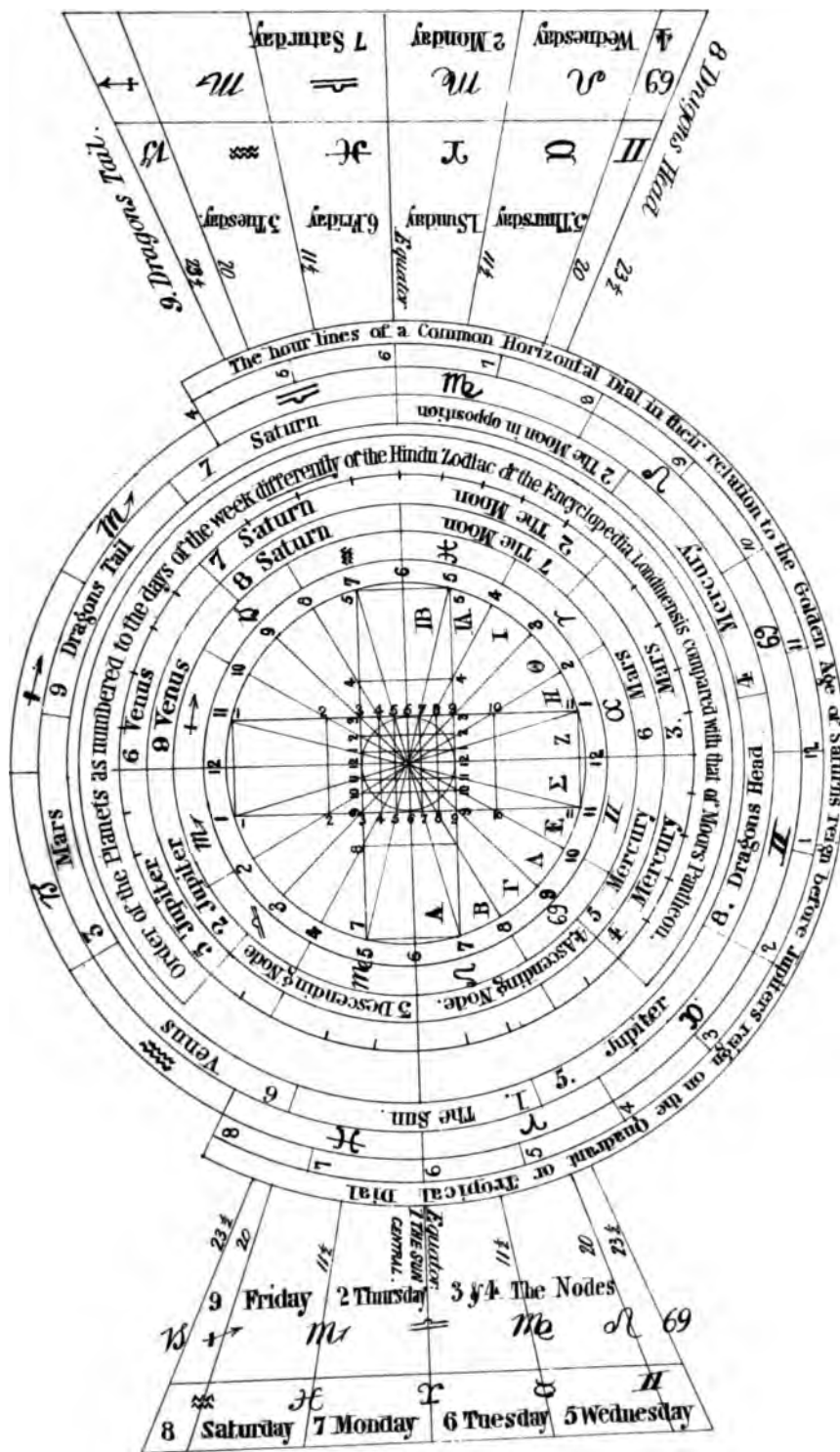
The Diurnal Arc on an East and West Dial, variously symbolised to the signs of the Zodiac :—

1st.—As returning Eastward from the North, according to Enoch's astronomy.

2d.—As returning Westward from the North. This brings Ω to the *right* of the Solstitial Colure, as in Ezekiel's Vision of Prophecy respecting heaven as God's throne, cap. i, v. 10. Compare Jonah iv. 11, for the 120,000 souls in NINEVEH, too ignorant to discern between their right hand and their left.



is description of the Sun and Moon going forth together southward from the Sun's third eastern gate of seven days, which preceded the Moon's opposition at full; as the beginning of her waning circuit of seven days, until change from the third to second gate for Friday and Saturday. Hence when the Sun and Moon were each measured by an arc of 90°. The first circuit would terminate at ♄ for Tuesday, the second circuit of seven days terminated at the place of the Moon's opposition, the third circuit extended over Wednesday, and the fourth over Thursday, to the Sun's third gate. The Moon's change from the Sun's third to his second gate, for Friday and Saturday.

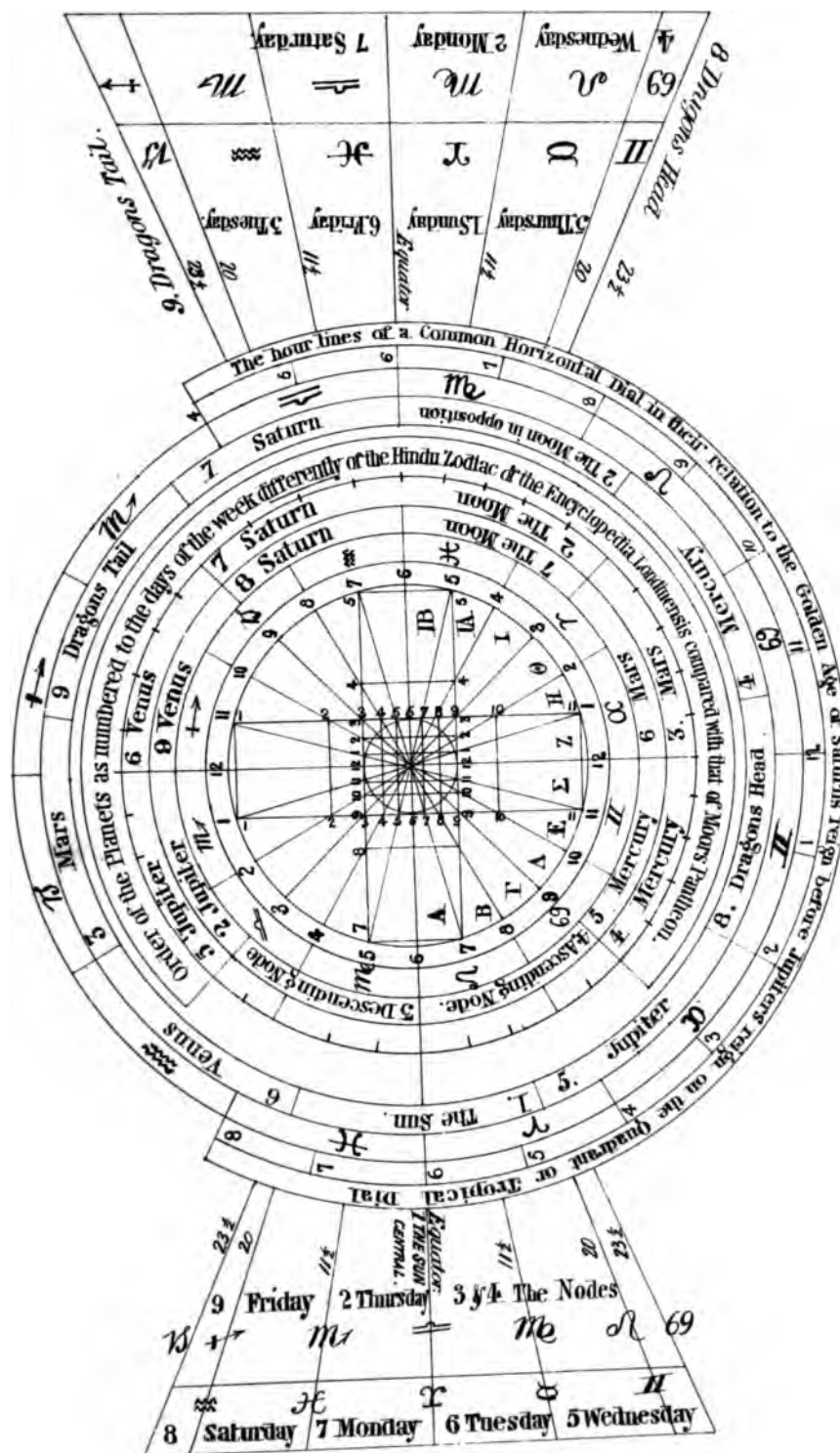


N.B.—The Greek letters mark the relation of the curved part on the Oriental dial with steps (as a mode of dialling for the day of twelve hours in its relation to that of time).

It appears thus that their apparent diversities of form followed the differences which occurred from time to time in the ancient dialling of the Orientals.

In the Tropical or Quadrant Dialling of the ancient Orientals the Equinoctial points were placed mid-way between the Tropics of Cancer and Capricorn, the Egyptians when placing the TROTH of their year midway in ♊. This is the form followed in the construction of the Trigon, when setting ♊ in the south, on their left hand. Enoch's description of the Moon going forth northward with the Sun from his fourth gate (viz., ♄) at two circuits of seven days, or "the bright fortnight of his northern path" between new and full from the Sun for the two waning circuits of seven days from the place of her opposition, viz., when ♄

It appears thus that their apparent diversities of form followed the differences which occurred from time to time in the ancient dialling of the Orientals.



N.B.—The Greek letters mark the relation of the curved part on the Oriental dial with steps (as a mode of dialling for the day of twelve hours, in its relation to that of twice seven hours tropically reckoned) to the Polar Equinoctial, with its parallel hour-lines of $6 \times 15 = 90^\circ$ approximately compared with $7 \times 12 = 84^\circ$.

For I now seem to have conclusive proof that the hour-lines on the curved part of the Alexandrine Dial were drawn with *Radius* (the *javelin* of Pharon, son of Sesostris, by which, when thrown into the Nile, its waters rose from the 15 cubits of Gen. vi, 20, to the 18 cubits of Herod. ii, c. 111), tangent 18, and its multiples or Tan 18, 36, 54, and 72, for 15, 30, 45, 60, and 75. Thus when 12×18 represented the 216 years numbered to the reign of the 8 oldest god-kings of the Summer season in Egypt, 12×12 (as 8×18 years numbered to the reign of the 18 Ethiopians of Herodotus), represented the Winter day of Man's communion with God on earth, as measured by 144, for the 144 multiplied thousands over the first-fruits of the world's redemption in Christ, as children of light and of the day. For thus the language of Jewish typical prophecy divided between the religion of the Jews, compared with that of Egyptian idolatry, as between light and darkness, under a metaphor derived from the Egyptian dialling of those days, as confirmed by the preternatural darkness from the 6th to the 9th hour at our Lord's crucifixion.

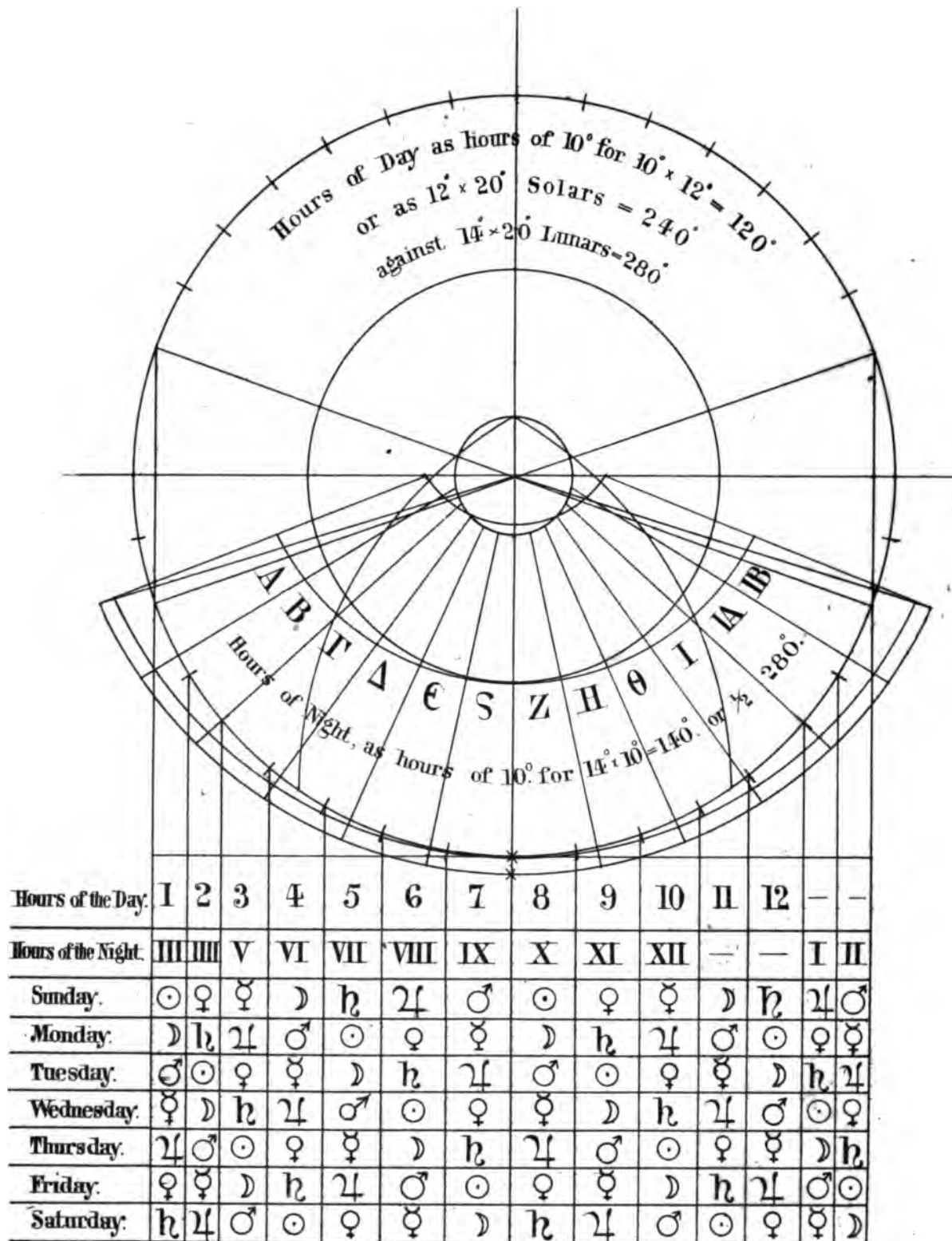
In the Tropical or Quadrant Dialling of the ancient Orientals the Equinoctial points were placed midway in ♈ and ♏ the Egyptians when placing the TROTH of their year midway in ♈. This is the form followed by modern diallers in the construction of the Trigon, when setting ♈ in the south, on their left hand. Enoch's description of the Moon going forth northward with the Sun from his fourth gate (viz, ♈ as fourth from the Sun) is confirmed by the fact that the Moon's path is "the bright fortnight of his northern path" between new and full Moon; but from the Sun for the two waning circuits of seven days from the place of her opposition, viz, when returning from

For Enoch's description of the Sun and Moon going forth together southward from the Sun's third eastern gate two lunar circuits of seven days, which preceded the Moon's opposition at full, as the beginning of her waning course other circuits of seven days, until change from the third to second gate for Friday and Saturday. These lunar circuits of seven days were each measured by an arc of 90° . Hence when the Sun and Moon together southward from ♈ inclusive (as third from ♈), the first circuit would terminate at ♈ for Tuesday, the second circuit of seven days terminated at the place of the Moon's opposition at ♈ for Thursday, to the Sun's third gate in ♈. The third circuit extended over Wednesday, and the fourth over Thursday, to the Sun's third gate the place of the Moon's change from the Sun's third to his second gate, for Friday and Saturday.

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The days of the week, with the hours of day and night, as numbered to the planets in Blundevill's 'Book of the Sphere,' p. 373; in a form to illustrate the relation of the seven parallel hour-lines on the Steps to the twelve radiating hour-lines on the curved part of the Alexandrine Dial with Steps.

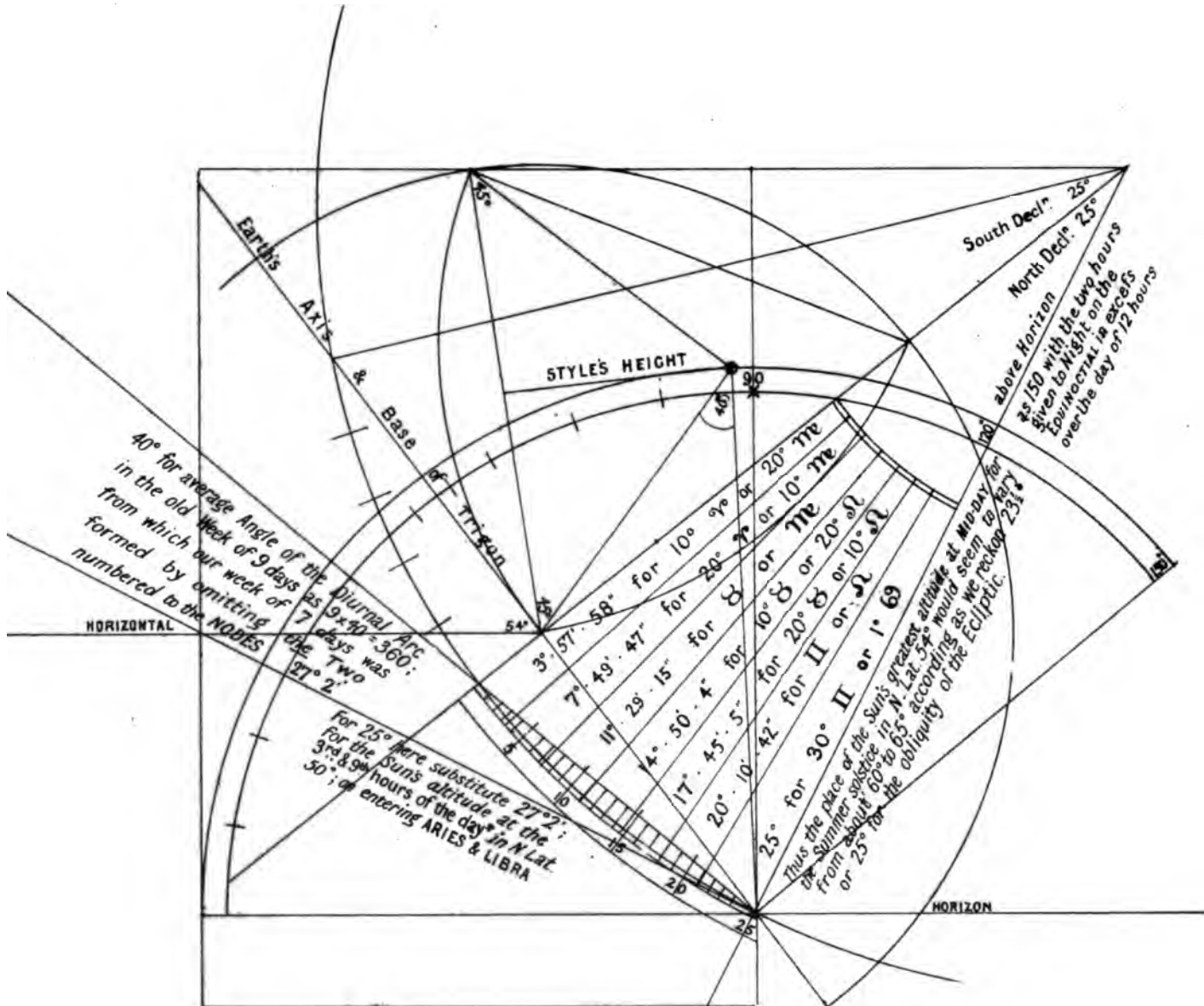


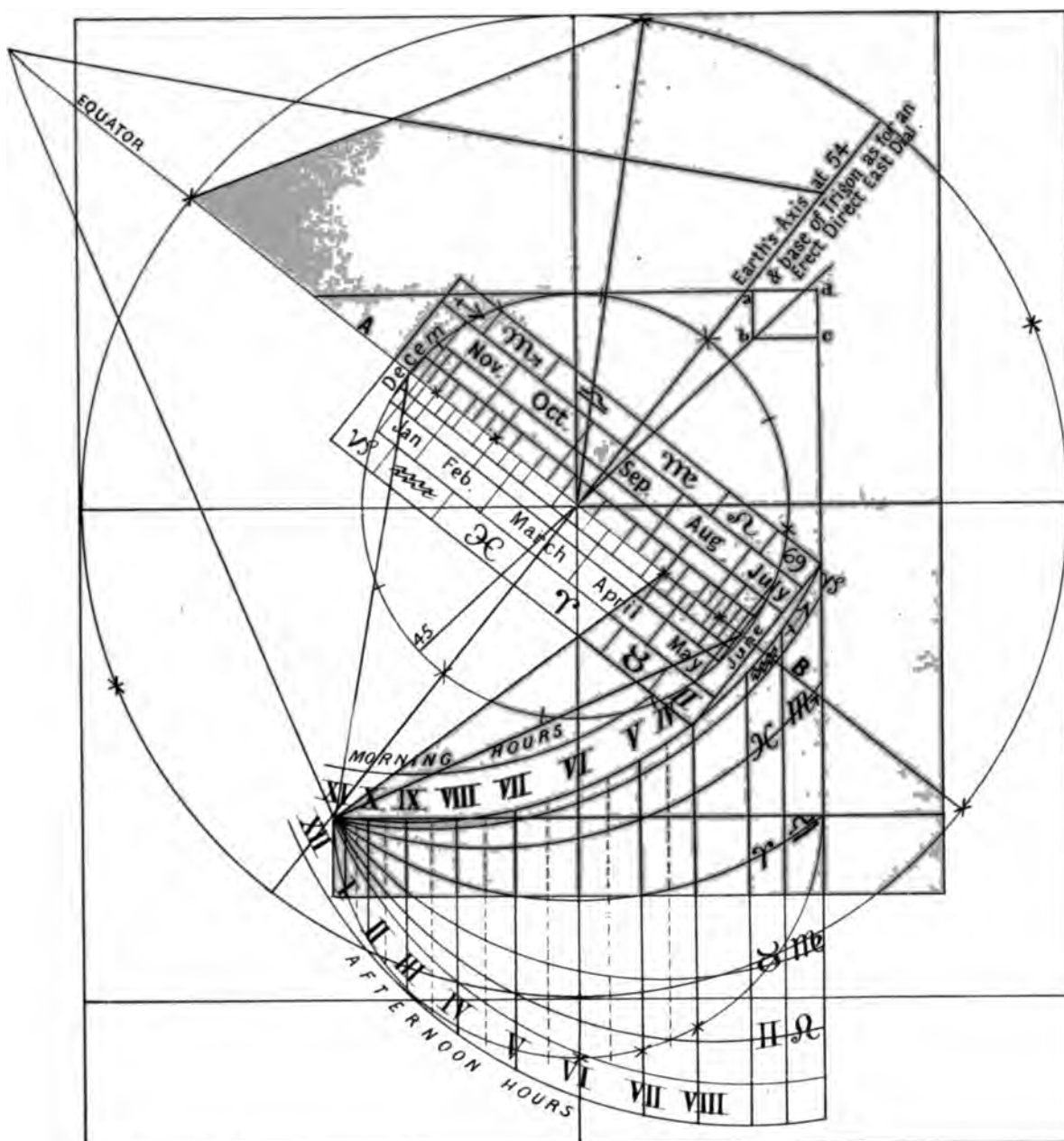
From the sixth to the ninth hour, on this mode of dialling, meant from twelve at noon to three P.M., or the time of evening prayer.

This, therefore, means from noon for the rest of the day, which is the case with the sun's shadow on the East Dial.

CONSTRUCTION OF A HOLLOW DIAL,

Representing two Sextants of the Equinoctial, for N. lat. 54° ; and subtended by Seven Steps, analogous in form to the Egyptian Dial with Steps, brought from Alexandria, and now in the British Museum.





FERGUSON'S KITE-SHAPED PORTABLE DIAL ON CARD;
Combined with an East Side-view of a Dial with Steps for Whitby (say N. Lat. 54°); Modelled after the
Greek Egyptian Dial with Steps, brought from Alexandria, and now in the British Museum.

DIRECTIONS FOR USING THE PORTABLE CARD DIAL.

(From *Ferguson's Lectures*, p. 207.)

"The lines $a d$, $a b$, and $b c$, of the Gnomon, must be cut quite through the card; and as the end $a b$ of the Gnomon is raised occasionally above the plane of the Dial, it turns upon the uncut line $c d$, as on a hinge.

"The line dotted $A B$ (viz., that dividing between the Eastern and Western Hemispheres on the Analemma, W. H.), must be slit quite through the card, and the thread C . must be put through the slit, and have a knot tied behind to keep it from being easily drawn out. On the other end of this thread is a small plummet D , and on the middle of it a small bead for showing the hour of the day.

"To rectify this Dial, set the thread in the slit right against the day of the month,* and stretch the thread from the day of the month over the angular point where the curve lines meet at XII.; then shift the bead to that point on the thread, and the Dial will be rectified.

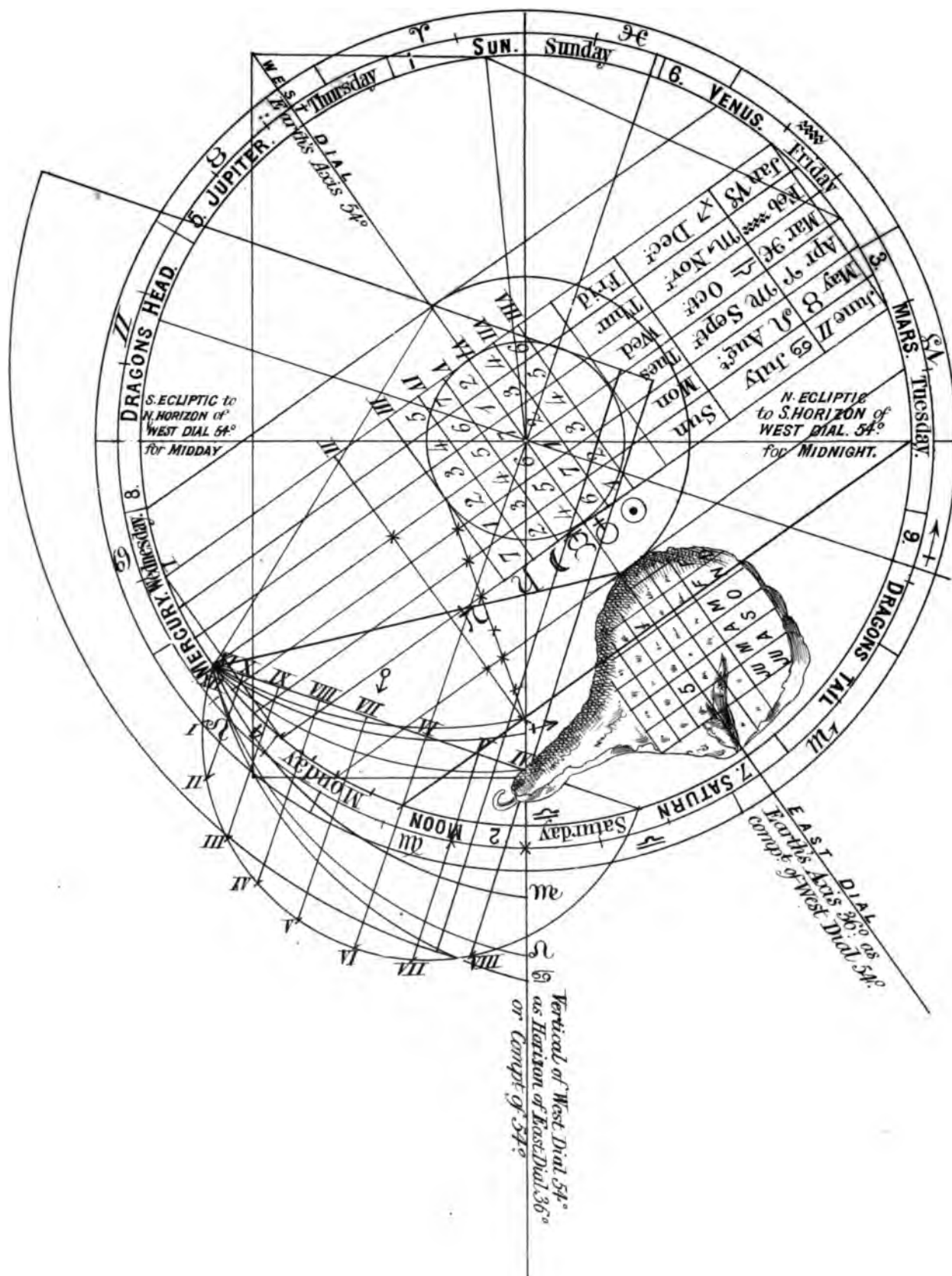
"To find the hour of the day, raise the Gnomon, no matter how much or how little (the object being merely to identify the actual shadow with the horizontality of the shadow line, W. H.), and hold the edge of the Dial next the Gnomon towards the sun, so as the uppermost edge of the shadow of the Gnomon may just cover the *shadow line*; and the bead then playing freely on the face of the Dial by the weight of the plummet, will show the time of day among the hour lines, as it is forenoon or afternoon.

"To find the time of sun-rising and setting, move the thread amongst the hour lines until it covers some one of them, or lies parallel betwixt any two, and then it will cut the time of sun-rising among the forenoon hours, and of sun-setting among the afternoon hours, for that day of the year to which the thread is set in the scale of months.

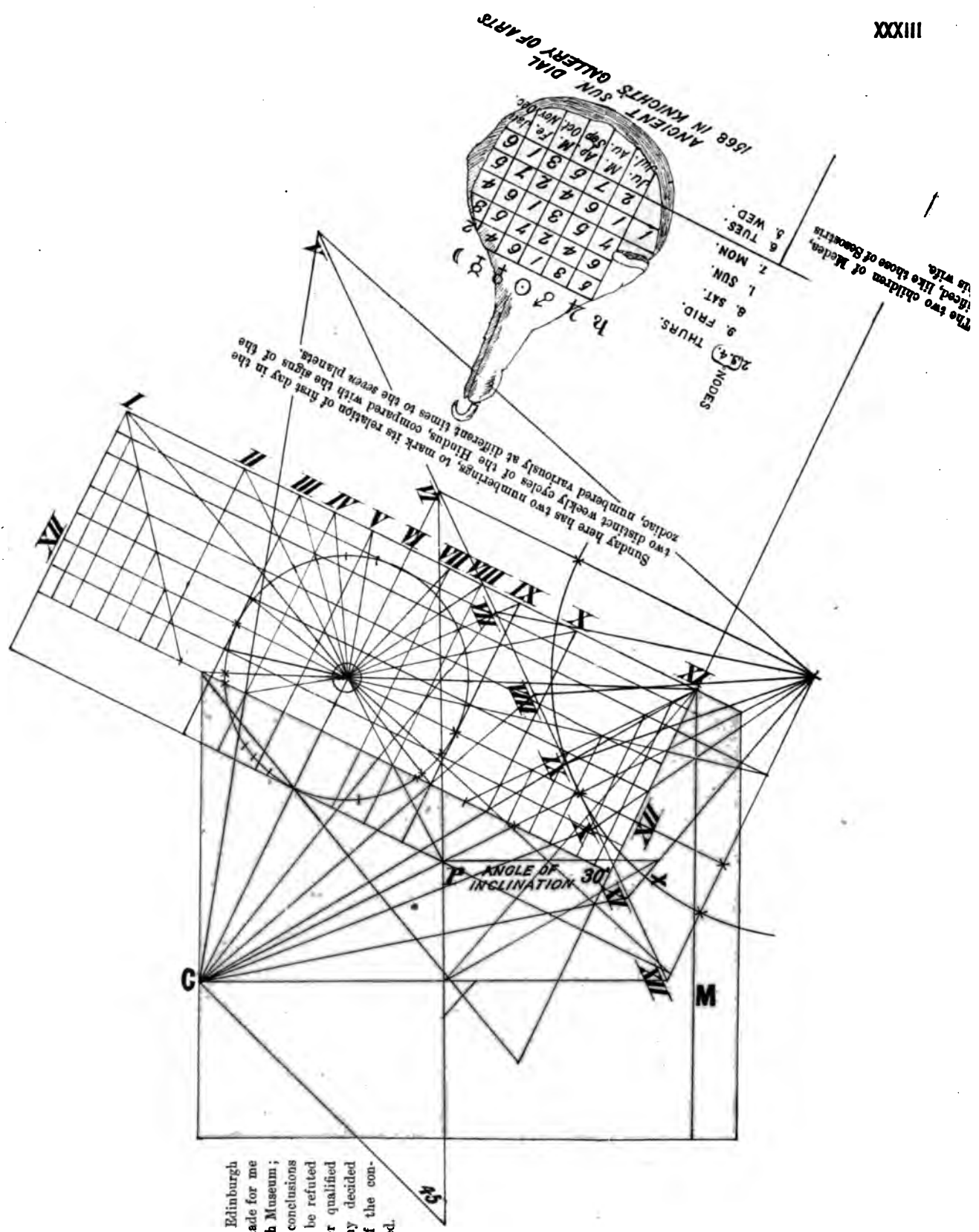
"To find the sun's declination, stretch the thread from the day of the month over the angular point at XII., and it will cut the sun's declination, as it is north or south, for that day in the proper scale.

"To find on what days the sun enters the signs, when the bead, as above rectified, moves along any of the curve lines which have the signs of the zodiac marked upon them, the sun enters those signs on the days pointed out by the thread in the scale of the months."

* This can only be done approximately on a small scale. The divisions of 10 days are reduced to those of 5 by the dots between the linear divisions of 3 times 10 for each month. The rest must be done ideally.



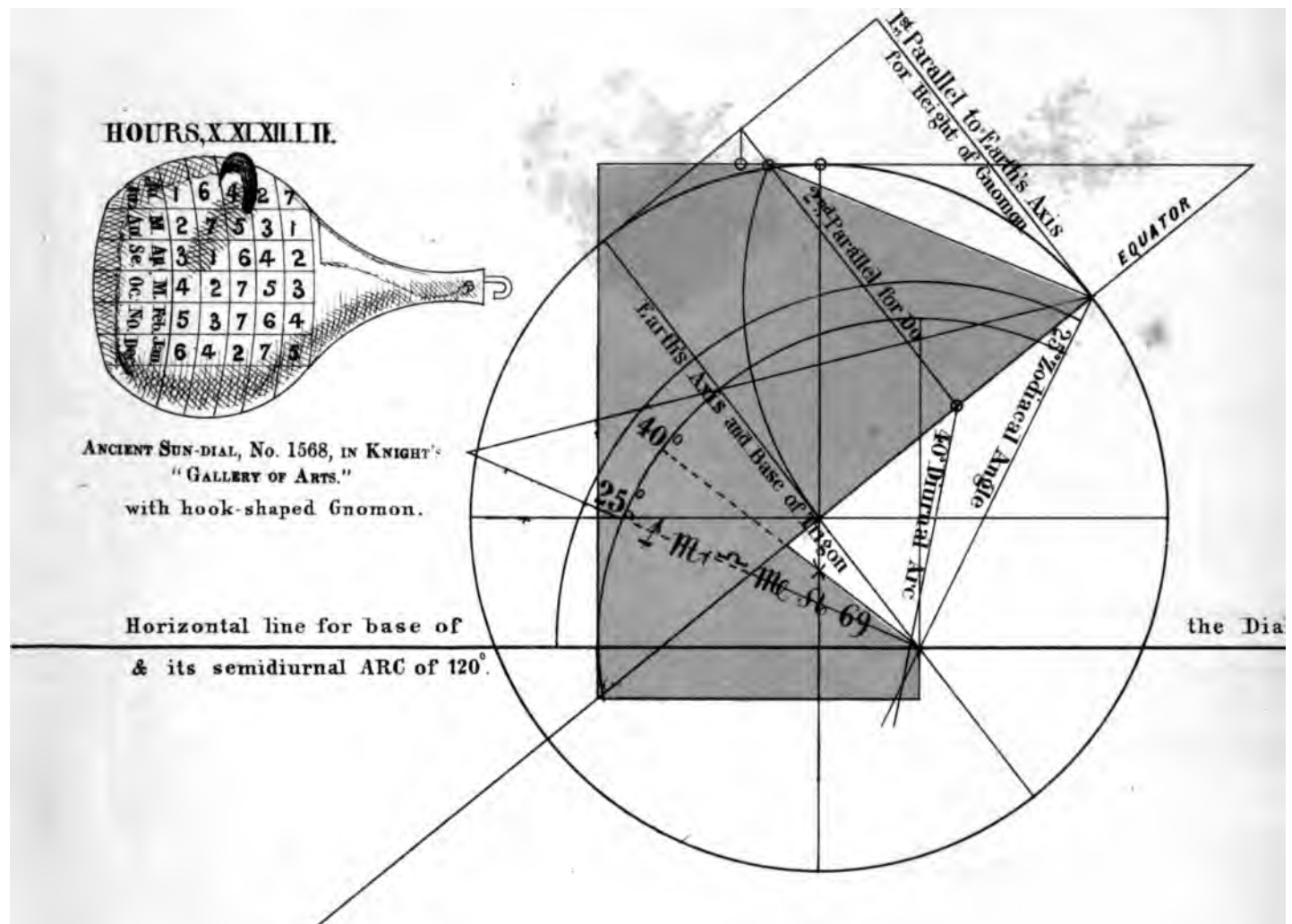
...lines on the Steps of the Greek-Egyptian Dial, found at Alexandria, were ascertained to demonstration, by comparison with the Upper Inclined East Dialling of Bedos de Callee, also with the Portable Meridian and Calendarium of the Ham Dial.



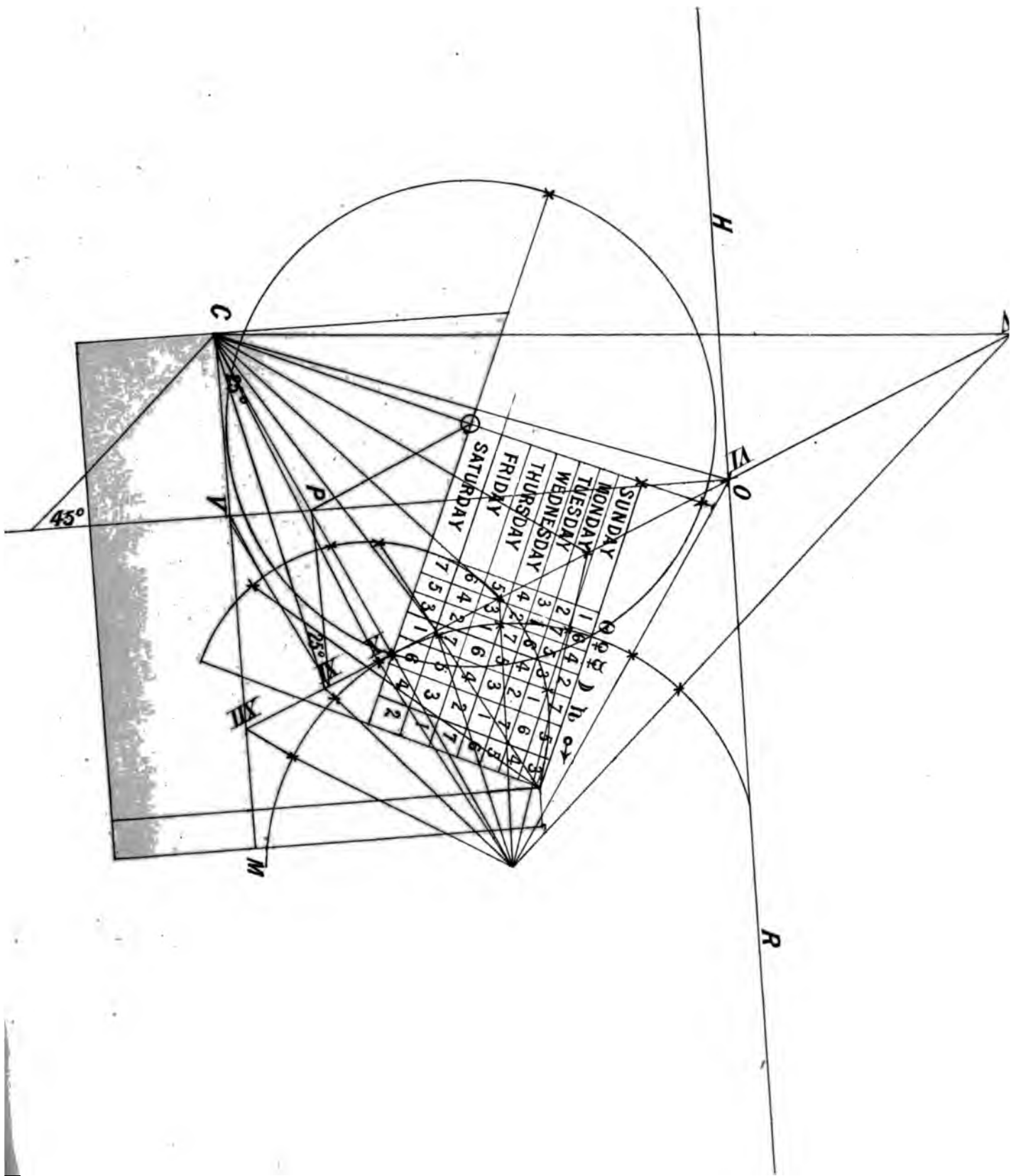
N.B.—Mr R. Sang of Edinburgh has one of the two models made for me by Mr A. Hayes of the British Museum; from which, I presume, the conclusions here taken for granted may be refuted or confirmed by those better qualified than myself to express any decided opinion on the soundness of the conclusion at which I have arrived.

THE STRUCTURE OF THE ALEXANDRINE OR GREEK EGYPTIAN DIAL, WITH STEPS, RECONSIDERED GNOMONICALLY, ALSO THAT OF ANOTHER VERY CURIOUS SUN-DIAL IN THE SHAPE OF A HAM.

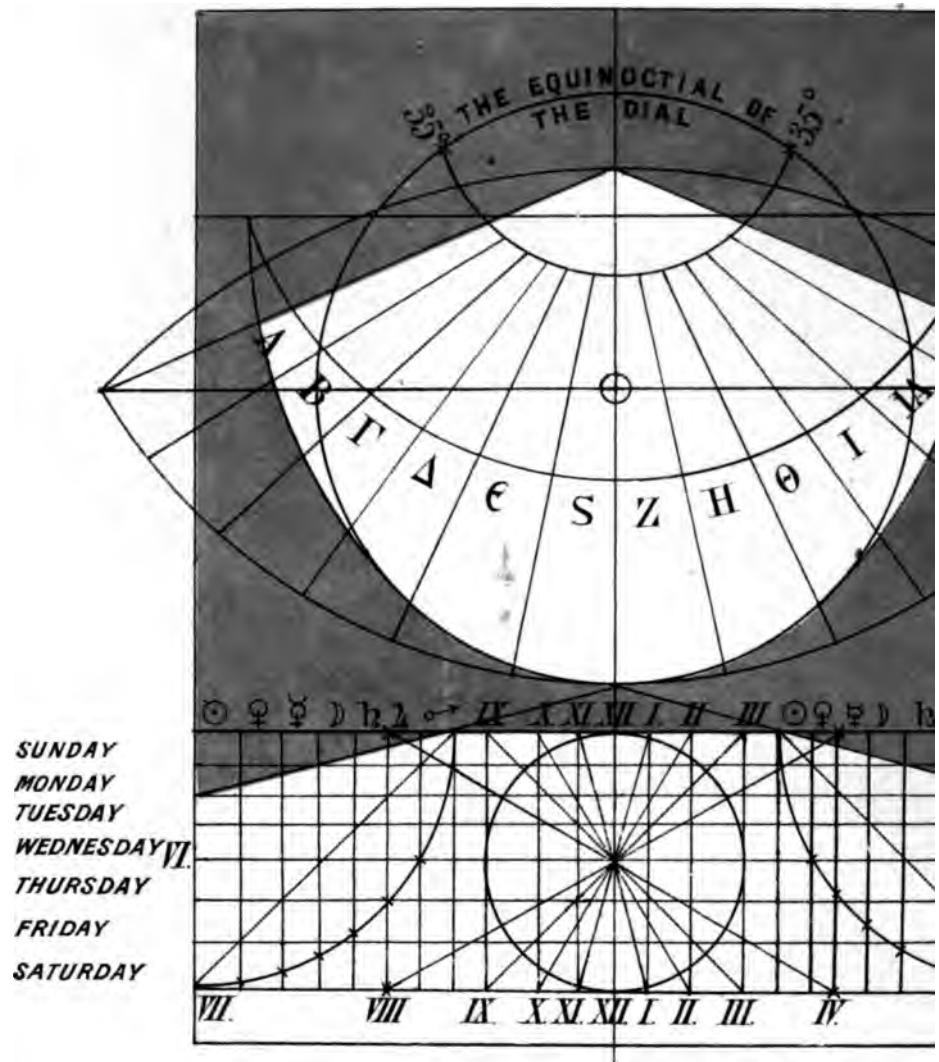
The Ham-Dial seemingly has a Calendar thereon. The 30 (or 5×6) divisions seem to number six cycles of 5 days to each lunation of 30 days. But whether numerals or not, the markings are illegible. Three, however, may be identified, on the supposition of its being a West Dial with Earth's axis on the hour-line of Six; for the equinoctial points must be brought under the brass meridian, and the solstitial points given to the east and west horizon of the Celestial Globe; for a reckoning of the diurnal arc as beginning at XII. o'clock, whether mid-night or mid-day. But the calendaring will hold good for an East and West, or Polar Equinoctial Dial, with Earth's axis on the hour-line of XII., as represented below.



* Compare the beginning of the diurnal arc from VIRGO, with the words of Ovid: "Jam redit et VIRGO, redeunt SATURNIA regna." Also the starting of the Argonauts at evening, when sailing from West to East to bring back the golden fleece; associating, as the ancients did, each renewal of the diurnal arc with the sunset of the previous day. Note also, in the week of 9 days each diurnal arc was measured by 40 degrees on the circle. This was associated with the division of years and lunations into 3 parts only, an arrangement preserved by the idolaters after the re-institution of the Sabbatic ordinance by Moses; for under that, years and lunations were thenceforth to be typically divided into 4 parts,—substituting $4 \times 7 = 28$, for $3 \times 9 = 27$, or $3 \times 10 = 30$,—to perpetuate a typical memorial of the primeval Sabbath. When the 8 gods reigned in Egypt (for the weekly and monthly cycle of 8 was idolatrously substituted by Jeroboam, Kings xii. 32, for the Jewish Feast of Tabernacles in the seventh month), the diurnal arc measured 45° ; for $8 \times 45 = 360$. In this cycle no account was taken of Sunday; but in Noah's week of 9 days, out of which the week of 7 days arose (by omitting the 2 numbered to the NODES of ascending and descending light), Sunday characterised the first day of the week, or day following the Sabbath; as under the typical dispensation of Moses to the Jews in redemption from bondage, to the idolatrous worship of the Egyptians, Sunday marked the beginning, and the Sabbath the close, of typical time. Hence the relation of the Seventh Seal, the Seventh Trumpet, and the Seventh Vial (in the Apocalyptic Vision) to the close of the Mosaic or typical dispensation; assimilated to the ingathering of the vintage, at the close of the Jewish harvest season, with the seventh month of their typical time.

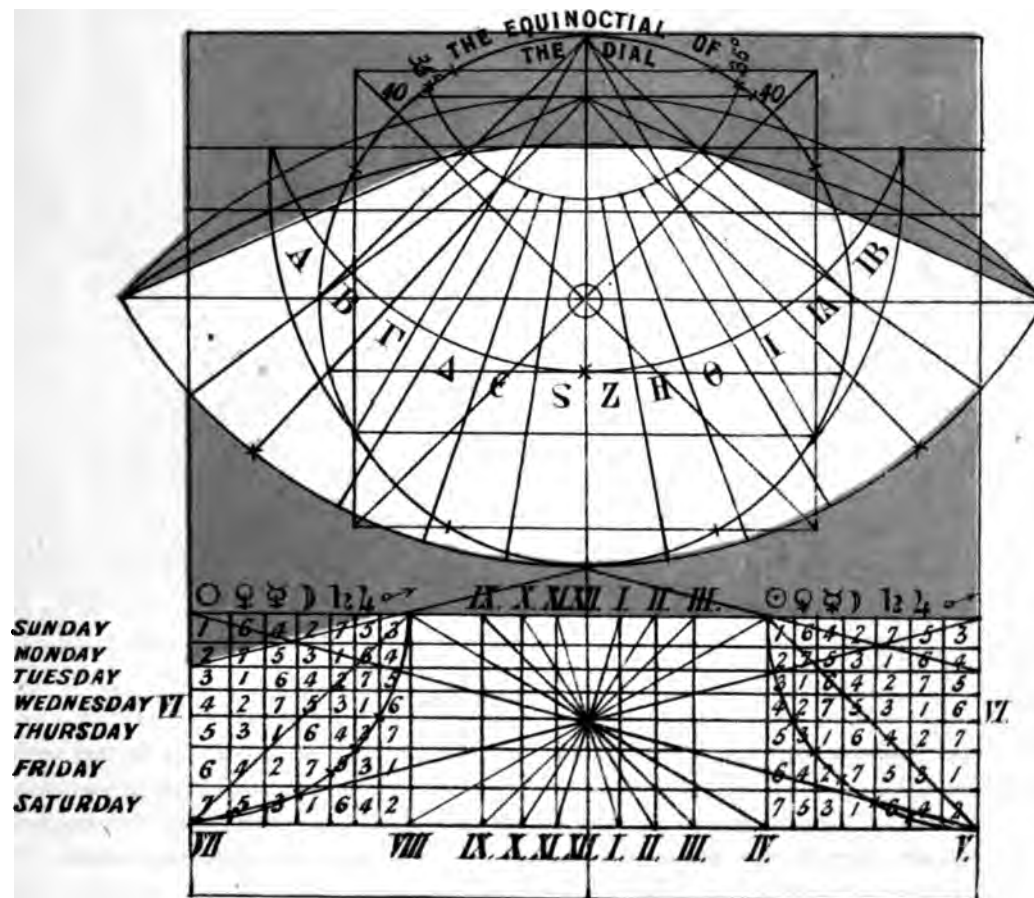


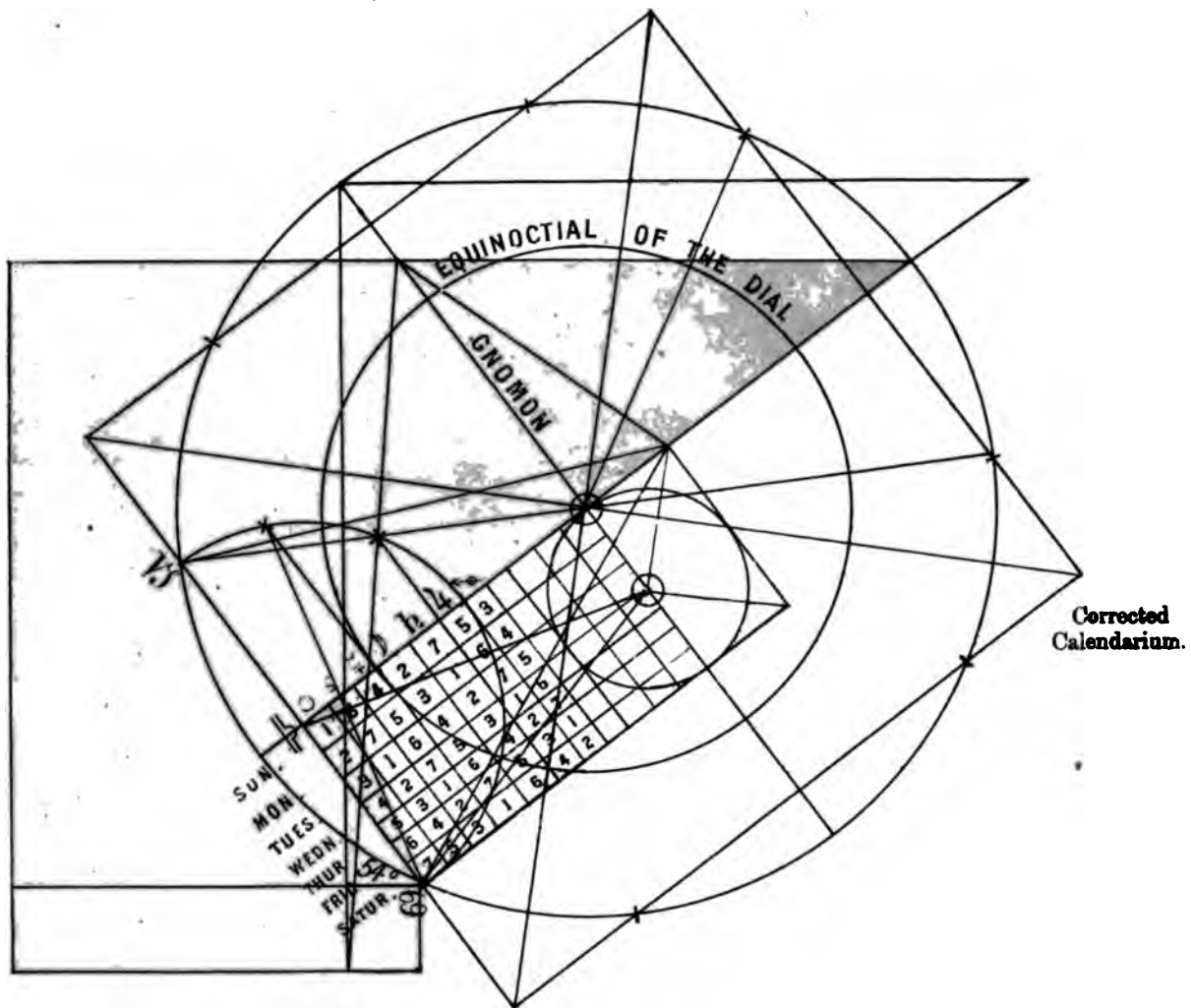
The Typical Structure of the Greek-Egyptain Dial with Steps, self-explained
view, so as to mark the relation of the lowest curve to the Equinoct



The centre from which to draw the uppermost curve of this Dial is the centre circle on the Steps.

Front view of a Dial with Steps for N. lat. 54° , from a model made after the Greek-Egyptian Dial with Steps, brought from Alexandria, and now in the British Musuem.

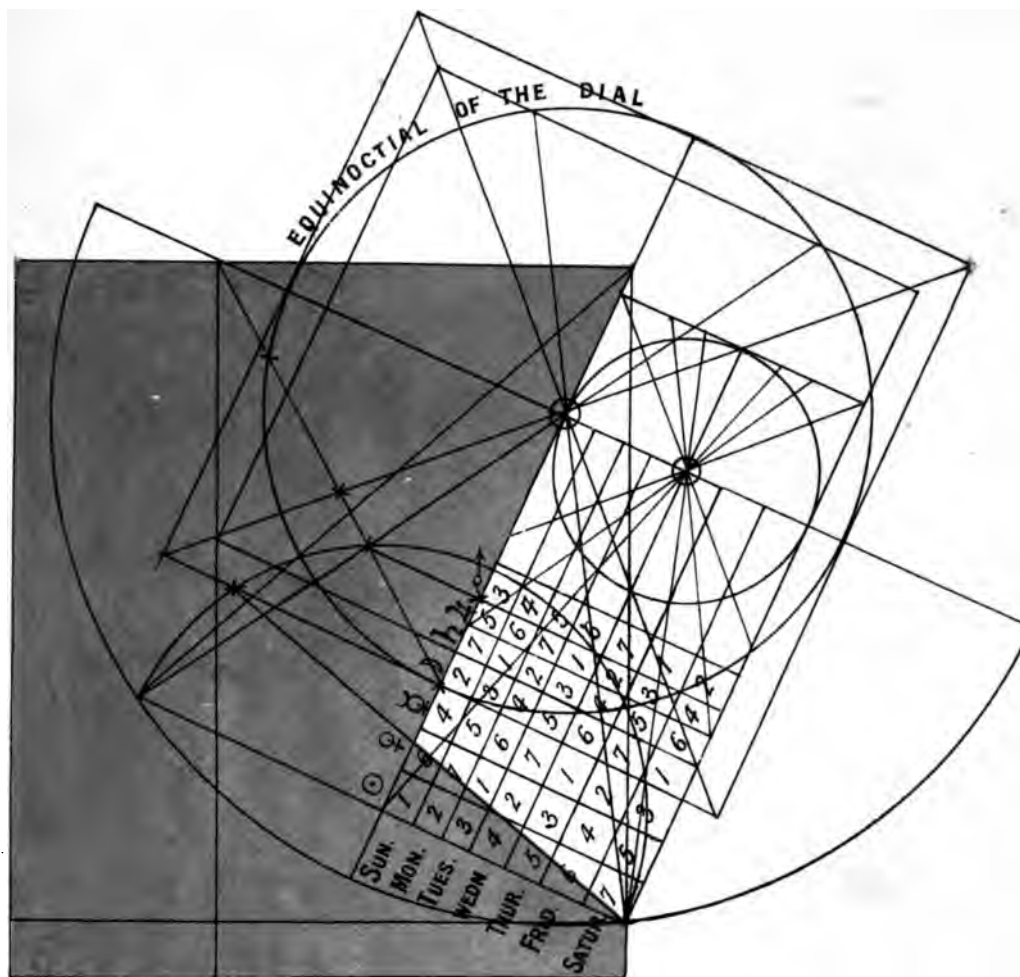




West face of the Alexandrine Dial with Steps ; as, seemingly, the face to which the Calendarium on the Steps applies.

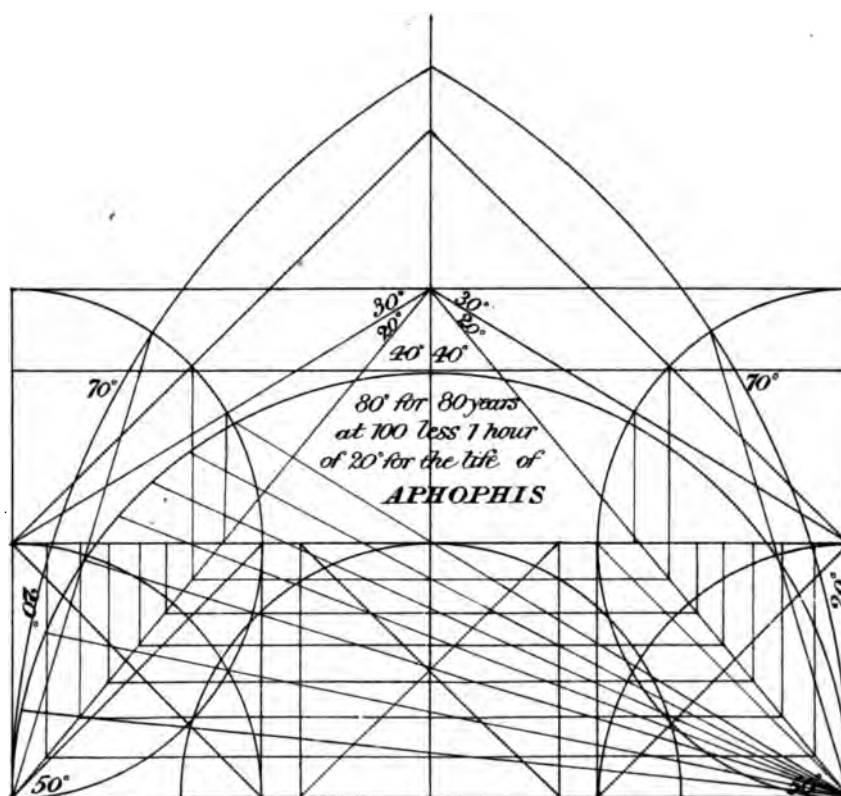
Compare this Calendarium (as given thus to the Sun's north declination) with the statue of 25 cubits high, which Rhampsinitus erected to Summer, at the west entrance of the Temple of Vulcan. He also erected another of the same dimensions, and in the same place, to Winter.

But Divine offerings were made only to that of Summer ; that of Winter being held in no honour at all.



West face of a Dial with Steps for N. lat. 54, from a model of the Alexandrine, or Greek-Egyptian Dial with Steps ; the typical object and structure of which are here assumed to be now clearly ascertained.

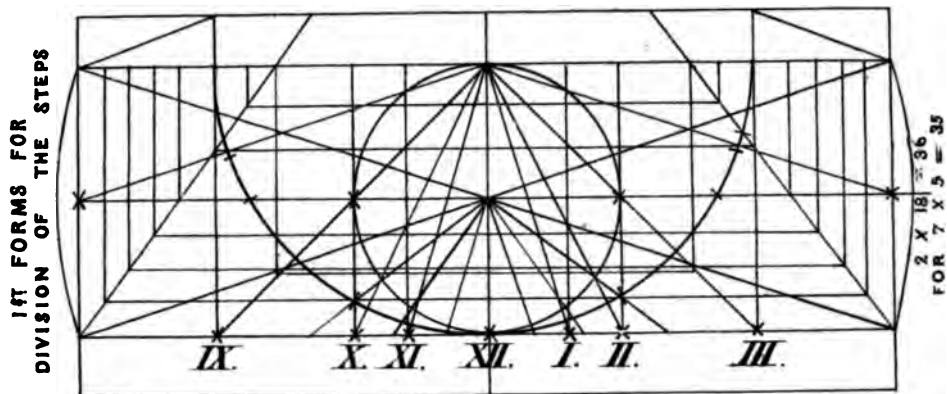
Law of the steps subtending the curved part of the Alexandrine or Greek-Egyptian Dial, with steps, as adapting to the *Tetartion* (or East and West Dialling of the Egyptians) the semicircular dialling of the Chaldeans, which Berosus invented *by hollowing it out of a square, and inclining it to the latitude*. The square was seemingly formed on a chord of 120° , for a circular analogy between the year of three seasons and the year of four seasons.



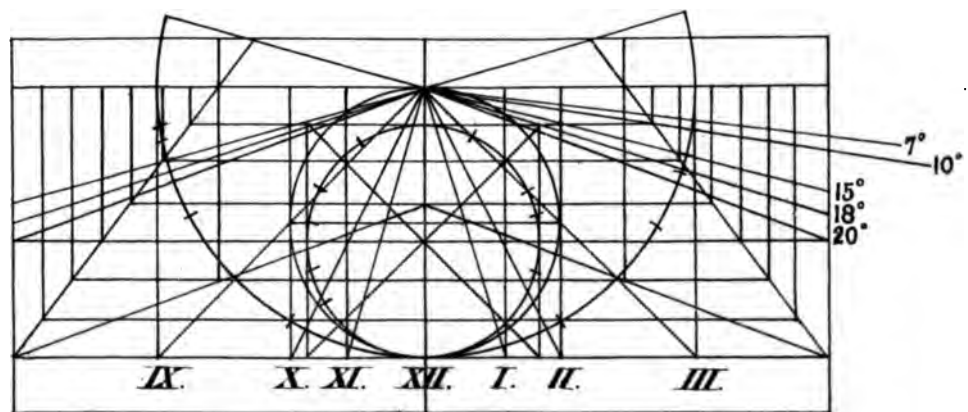
This is clearly capable of a variable adaptation from the $6 \times 10 = 60$ on the side steps (2 Kings xx, 8-12) to $7 \times 8 + 4 = 60$; $7 \times 9 = 63$; $7 \times 10 = 70$; $7 \times 12 = 84$; and $7 \times 15 = 105$, for N. Lat. 30° .

It appears, from the above analysis of the construction, that the front steps divided the quadrant of 90° , on the line of sines, into 6 times 10° , leaving 30° to the top step.

It also raises a presumption that the three small pyramids between the same parallel lines, and close together at Ghizeh, as above, did represent the same typical design as the steps of this dial.



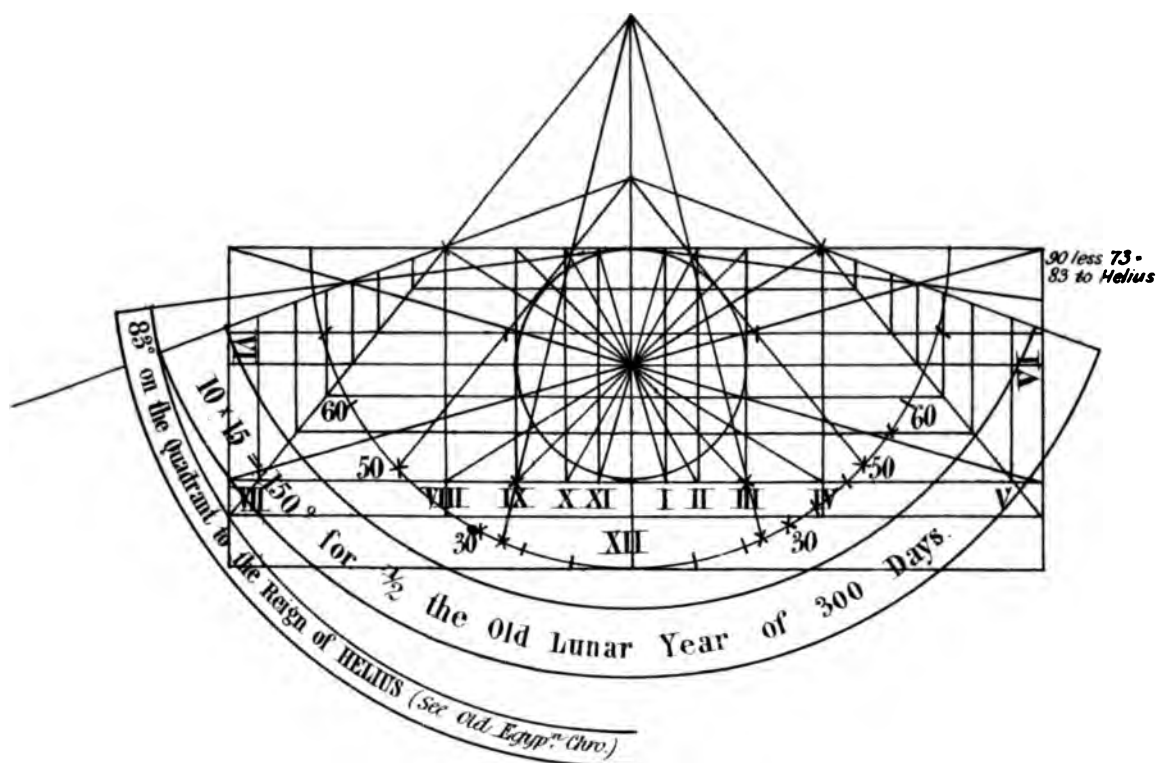
2d for Division of the Steps,
as nearest to the divisions on
the original Dial.



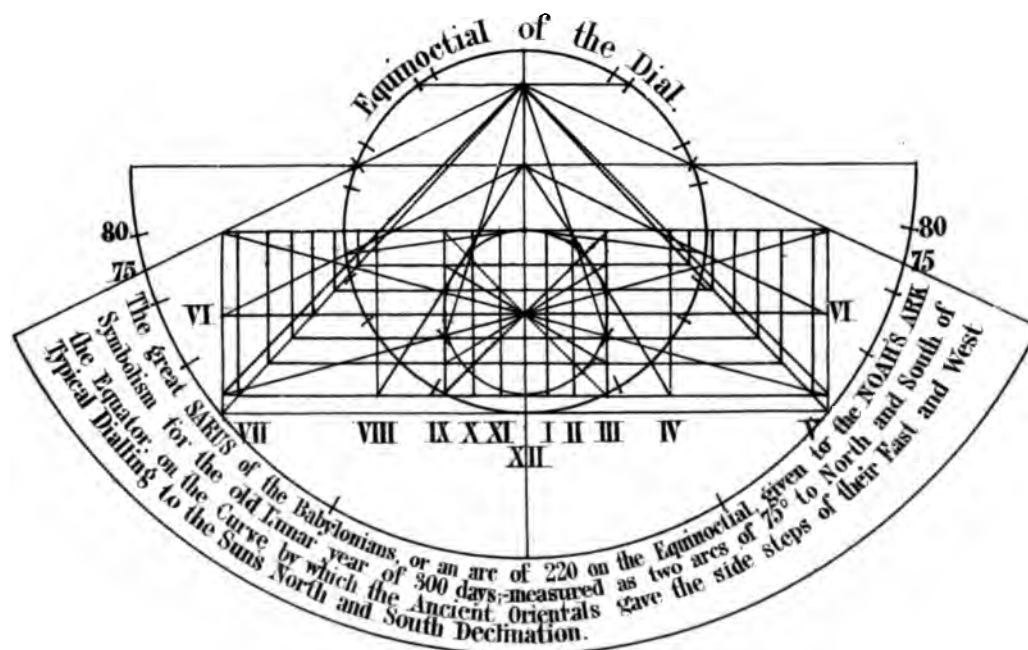
This puts out 7° from the Equinoctial, on both sides, for the top steps, leaving the Quadrant of 90 , reduced to the 83 years' reign of Helius, for $7 \times 12 = 84$, compared with $6 \times 15 = 90$.

N.B.— 180 , less 2×20 or 40 , give 140 , for the semi-lunar arc of 280 , to the front of the Dial.

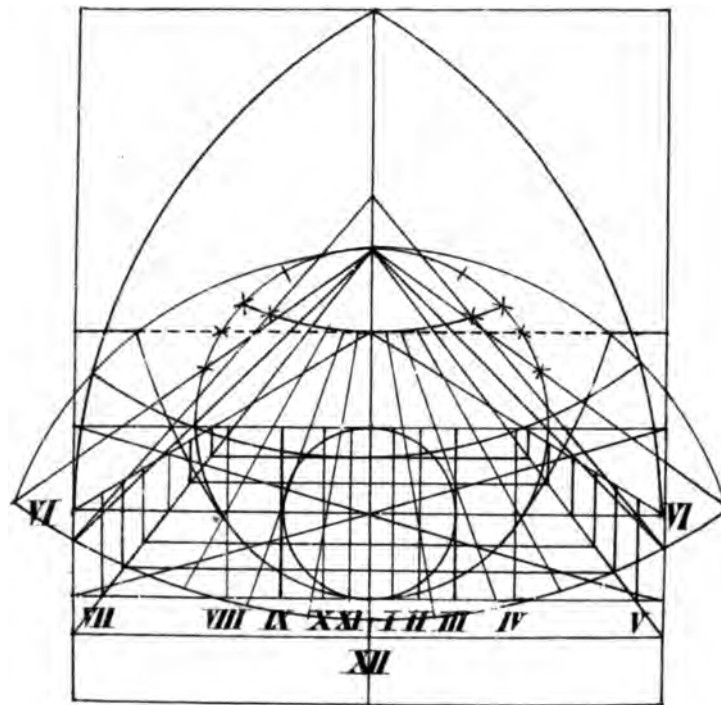
The Steps of the Alexandrine or Greek-Egyptian Dial, measured in their relation to the *semi-equinoctial* of the Dial, by way of tracing more exactly the typical and horological value of the Symbolism.



The Steps, for a Dial with Steps in N. lat. 54°, imitating that of Greek-Egyptian construction brought from Alexandria, and now in the British Museum.

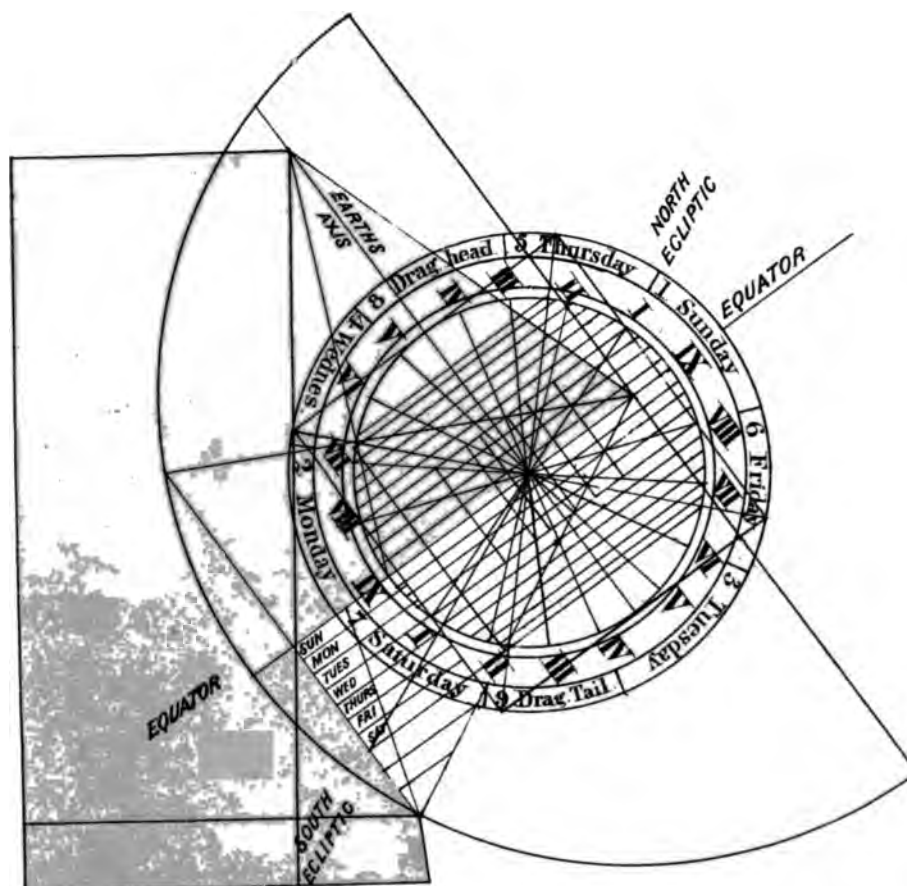


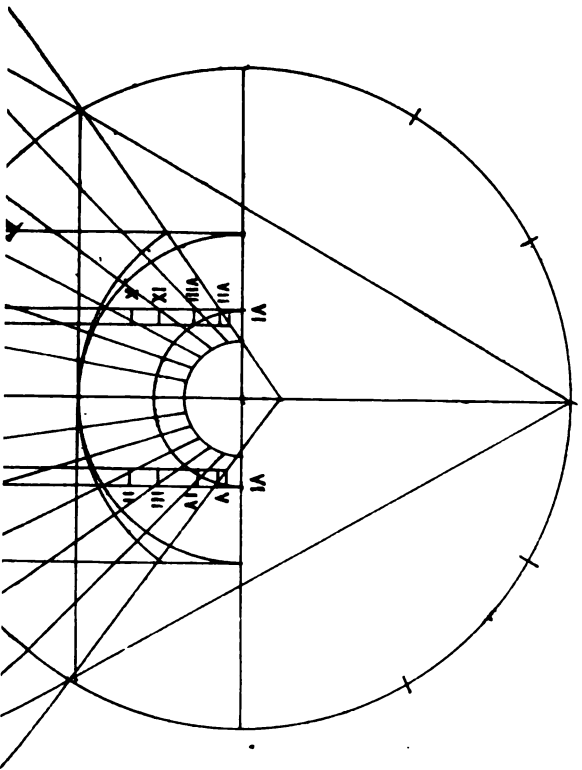
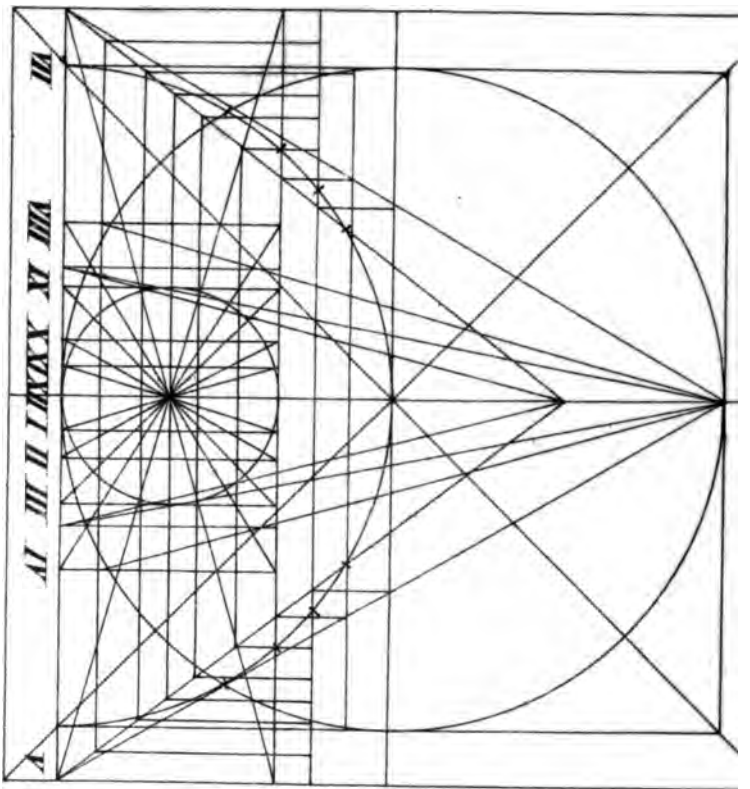
Relation of the Steps to the Equinoctial, for a
 Dialling with Steps in N. Lat. 54° , like that of the
 Ancient Orientals.



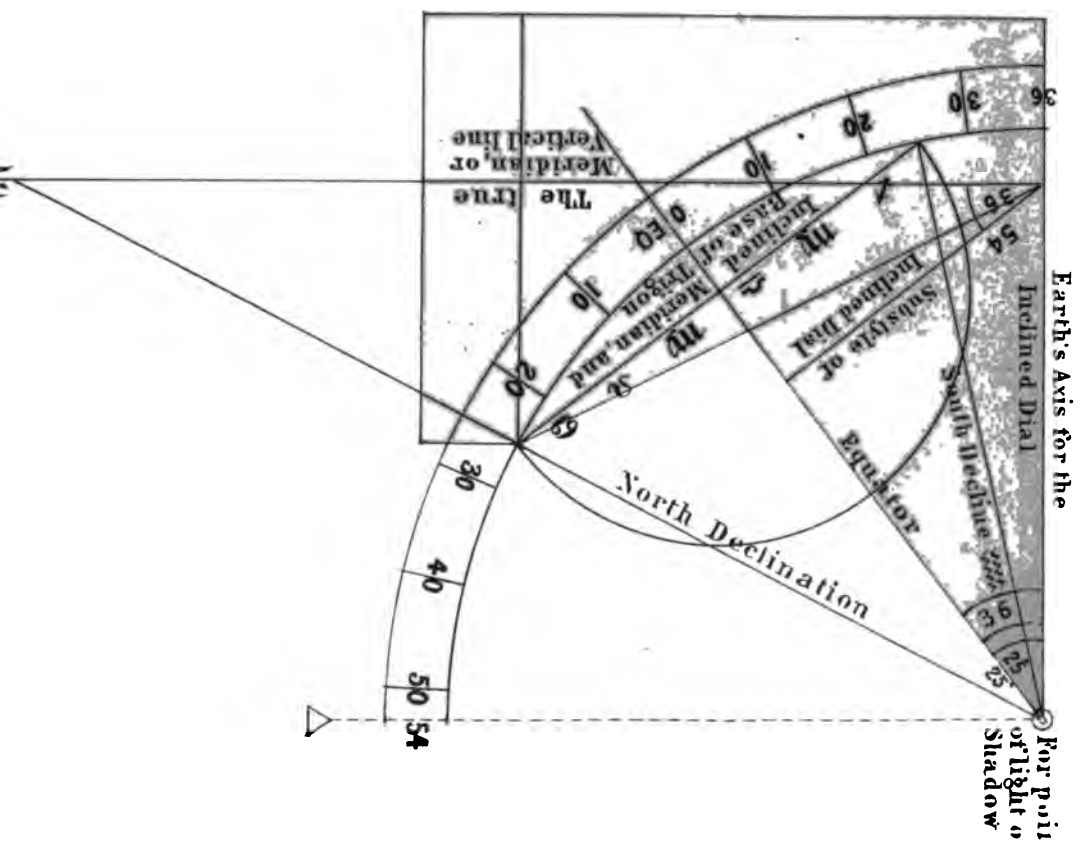
The Hindu Zodiac for the week of nine days, as $9 \times 40 = 360$, on the Equinoctial, reduced (by the symbolism for the four-square City of Light, or the new Jerusalem within the Equinoctial) to nine hours of Enoch, as hours of 20° , or 80 minutes to an hour. These represent the diurnal half of the Equinoctial, as given to the 18 Ethiopians of Herodotus, for $18 \times 20^\circ = 360^\circ$.

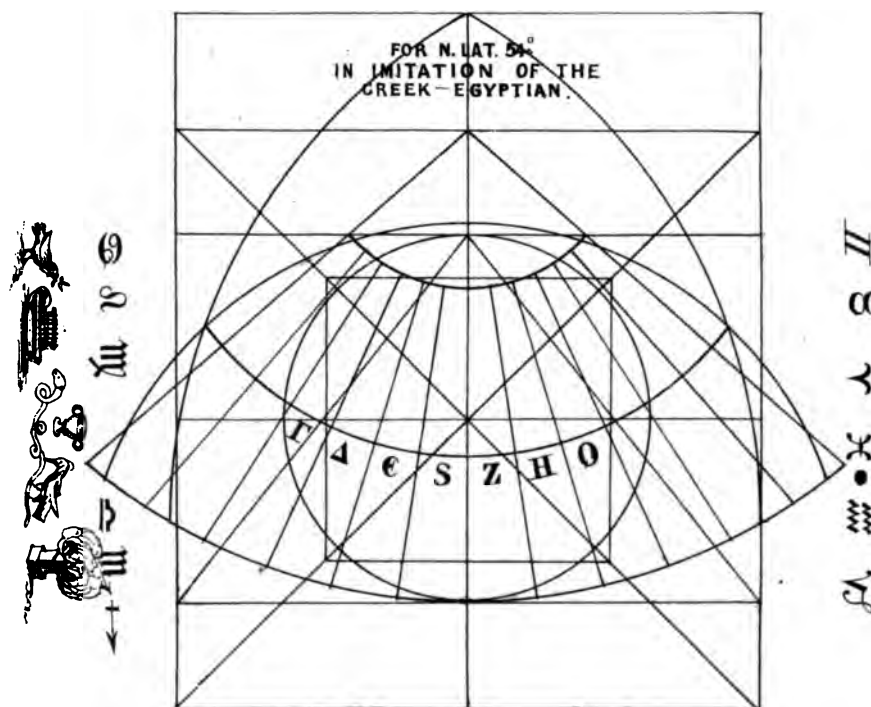
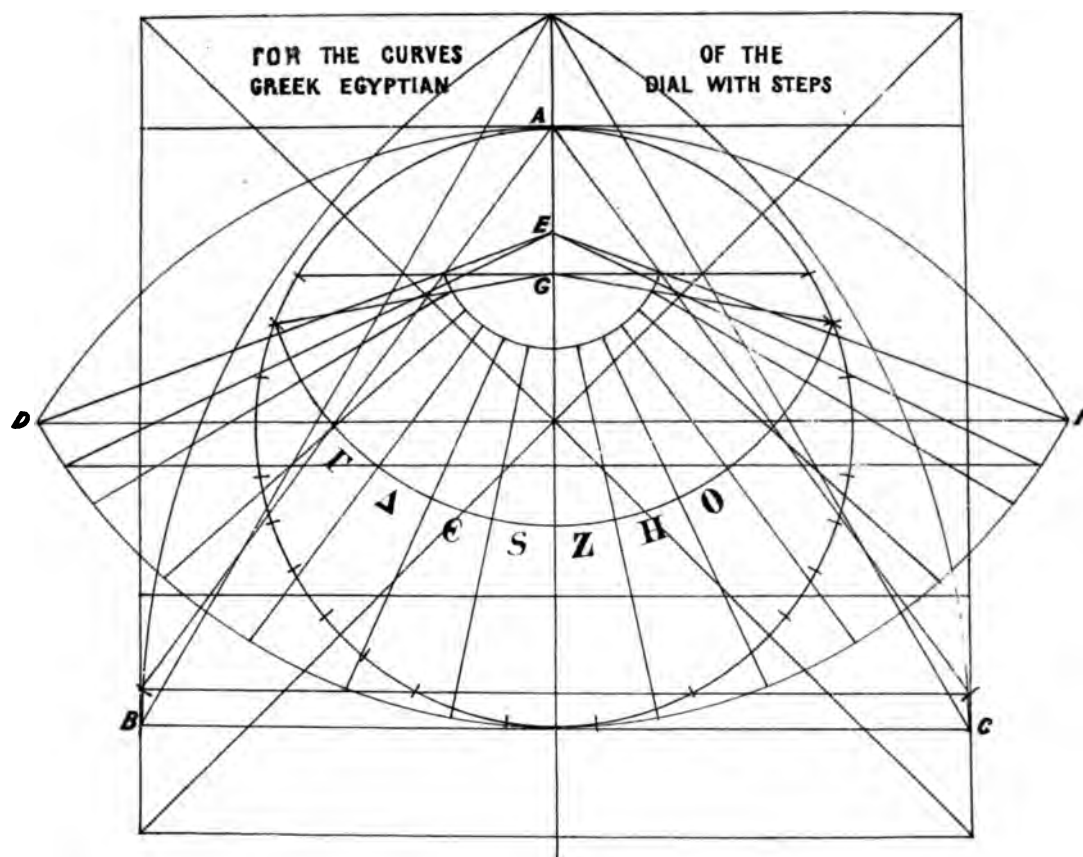
This typical Dialling gave the *Western Horizon* to North lat. for an astronomical reckoning of the day from noon to midnight, on an erect direct West Dial in North lat. It seems to be, in this sense, that the primeval day of Jewish tradition was said to have begun "at evening time," viz., as the Sun was turning from East to West. (See Zech. xiv. 7, and Gen. i. 14.) This symbolism answers to that in Ezekiel's prophetic vision of heaven as God's throne (chap. i. 10); for it places the zodiacal sign "Leo" to the right of the meridian, whereas the idolatrous worshippers of the rising sun, on an erect direct East Dial, would place "Taurus" on the right of the meridian. Hence, I suspect, that the ignorance of the Ninevites, in not being able to discern between their right hand and their left, Jonah iv. 11, had respect to an idolatrous deviation from the Jewish typical symbolism, which would place "Leo" on the right of the meridian, in its Dialling notice of typical and prophetic time. This, moreover, explains the meaning of Ezek. viii. 16, as referring to 25 idolatrous worshippers of the rising sun, within the typical sanctuary of Mosaic ordinance. For that placed the Holy of Holies at the west end, and the altar to the north-east of the porch. The worshippers of the rising sun, from an altar thus situated, must of necessity, in turning their faces to the East, have stood with their backs towards the most holy place, instead of worshipping towards it, as required by their typical law. The 25 idolators seem numbered to the 25° of the then zodiacal angle.

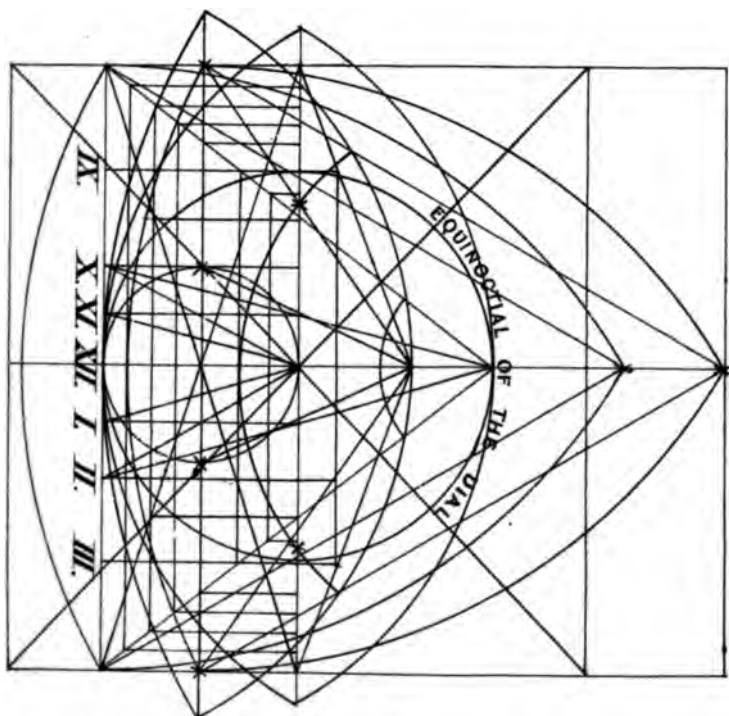
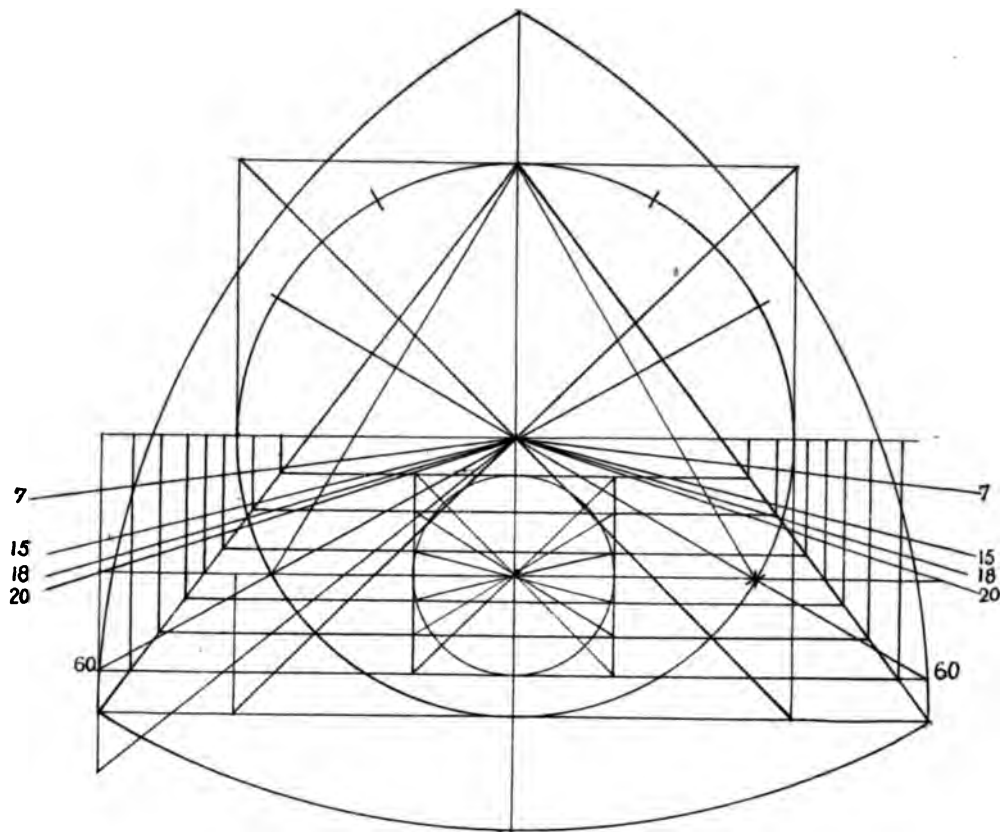




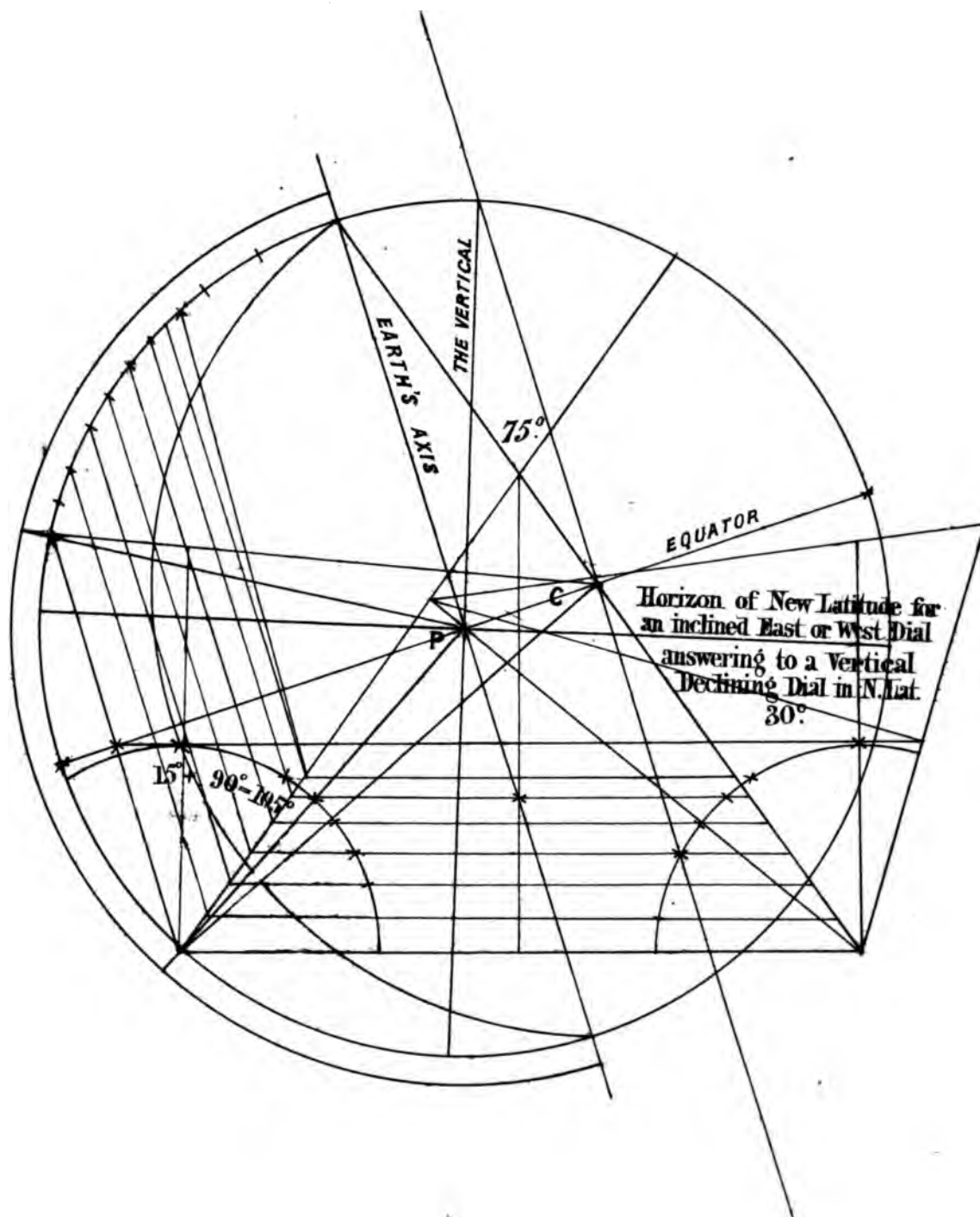
West Side of a Dial for N. Lat. 54°, constructed like the
Greek-Egyptian Dial with Steps.



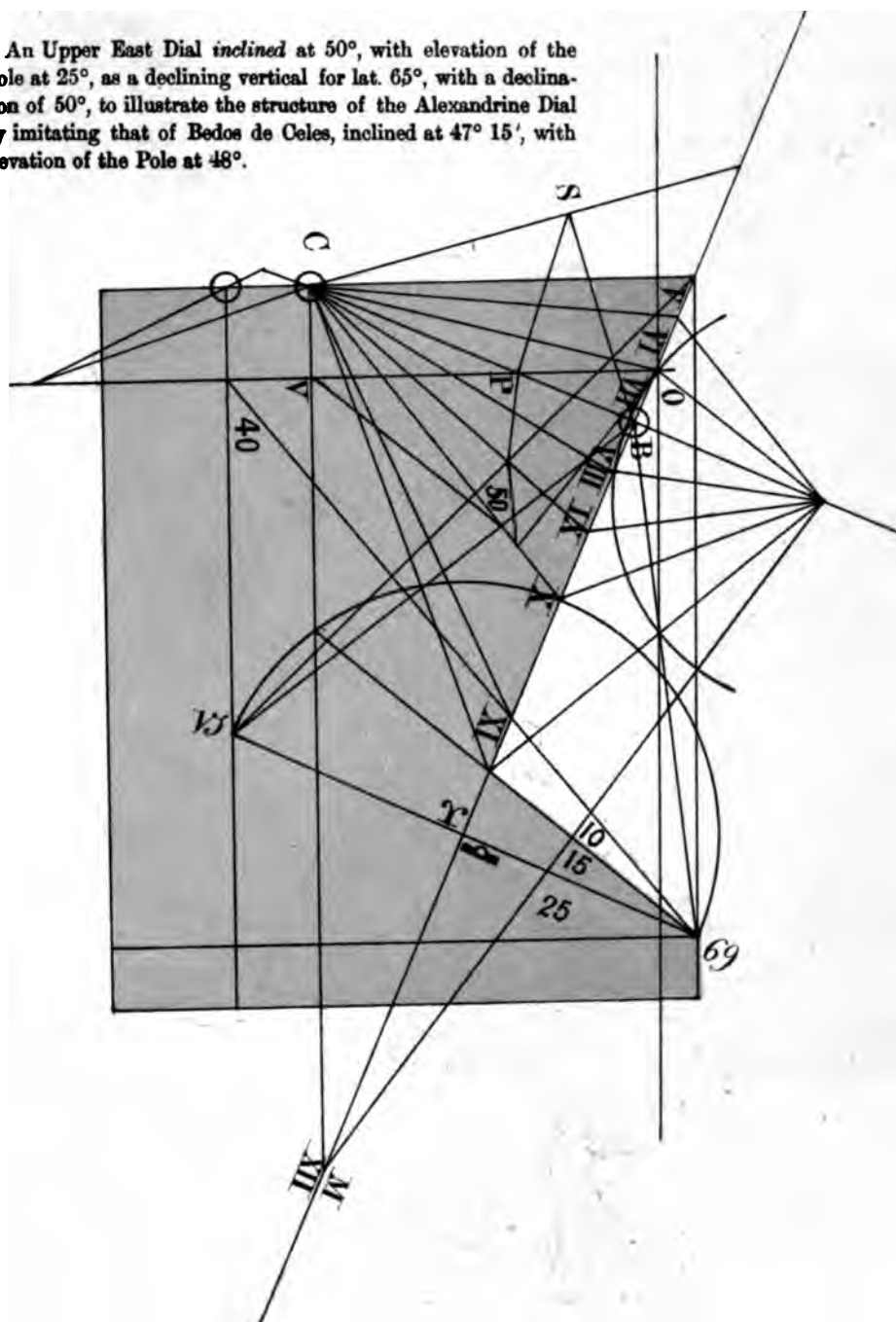




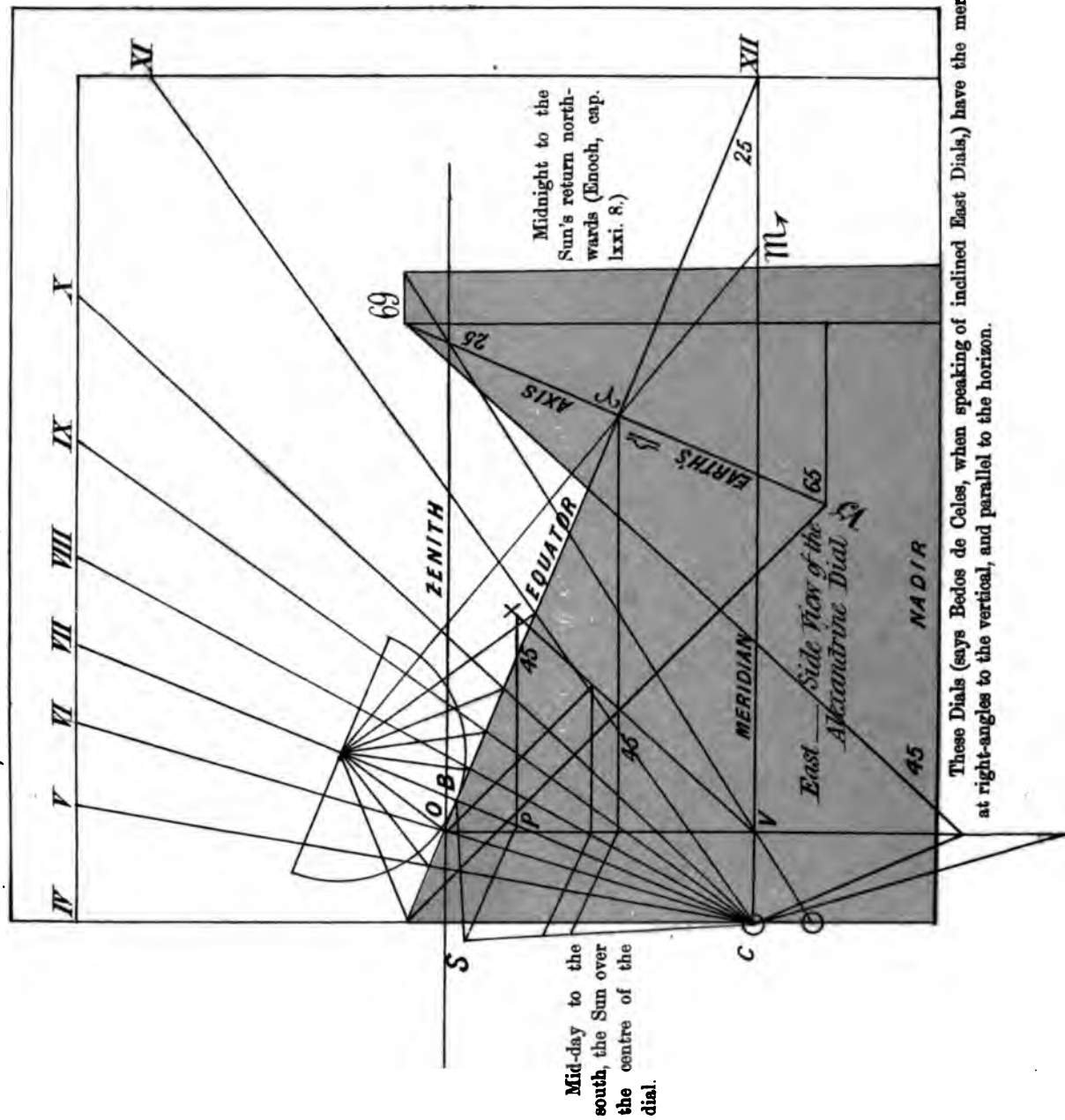
Relation of the Steps to the Equinoctial for a
Dialling with Steps in N. Lat. 54°, like that of the
Ancient Greek-Egyptian for N. Lat. 30°.



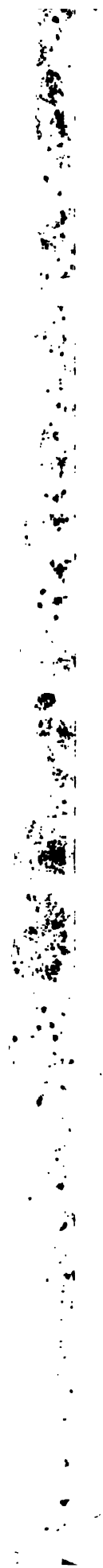
An Upper East Dial *inclined* at 50° , with elevation of the Pole at 25° , as a declining vertical for lat. 65° , with a declination of 50° , to illustrate the structure of the Alexandrine Dial by imitating that of Bedos de Celes, inclined at $47^\circ 15'$, with elevation of the Pole at 48° .



An upper-inclined East Dial for N. lat. 65, with inclination of 45°, constructed after the rule of Bedos de Celles, for an explanation of the Alexandrine Dial, on the supposition of its not being a South Vertical, but an East and West Dial.

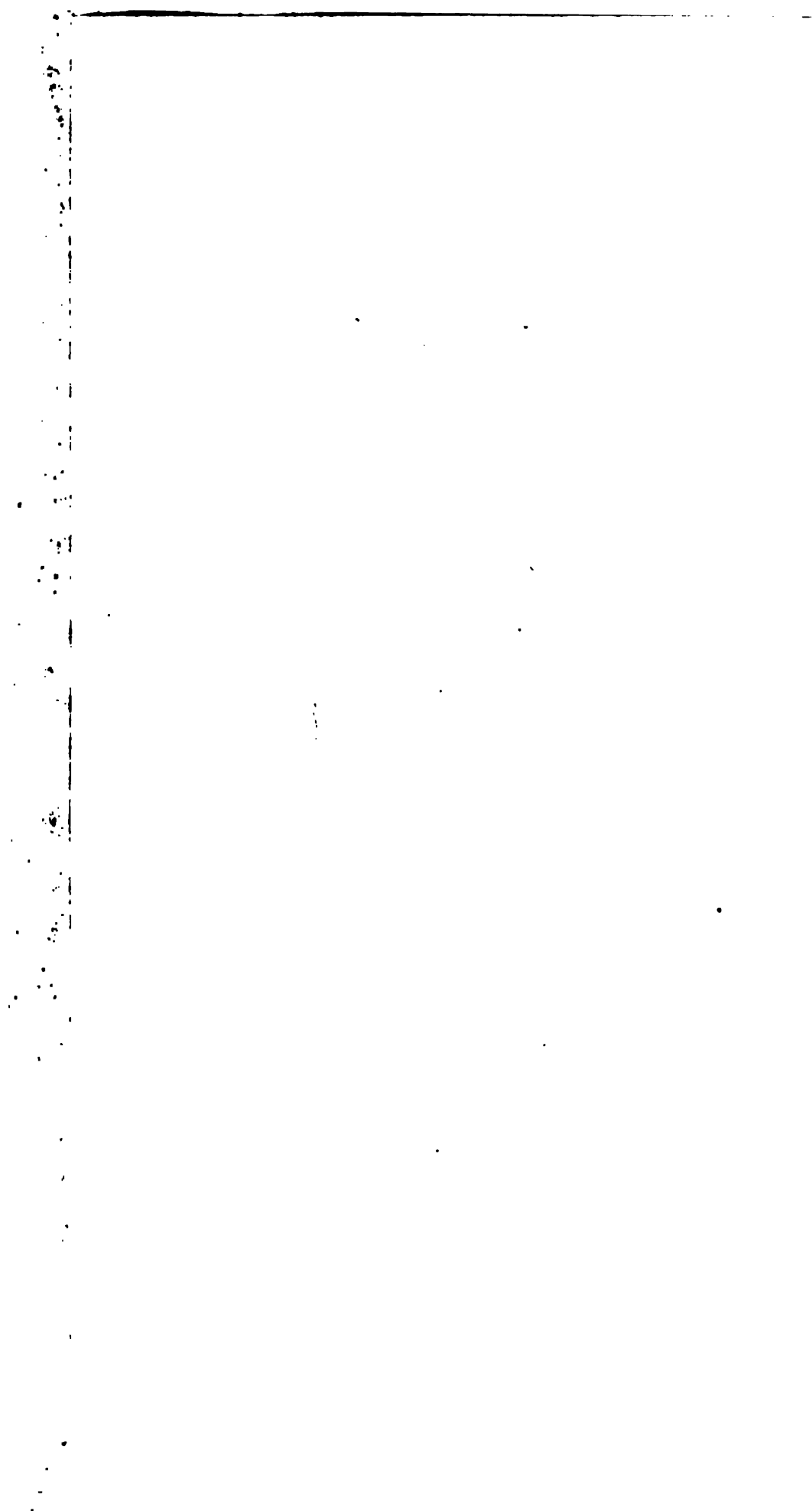


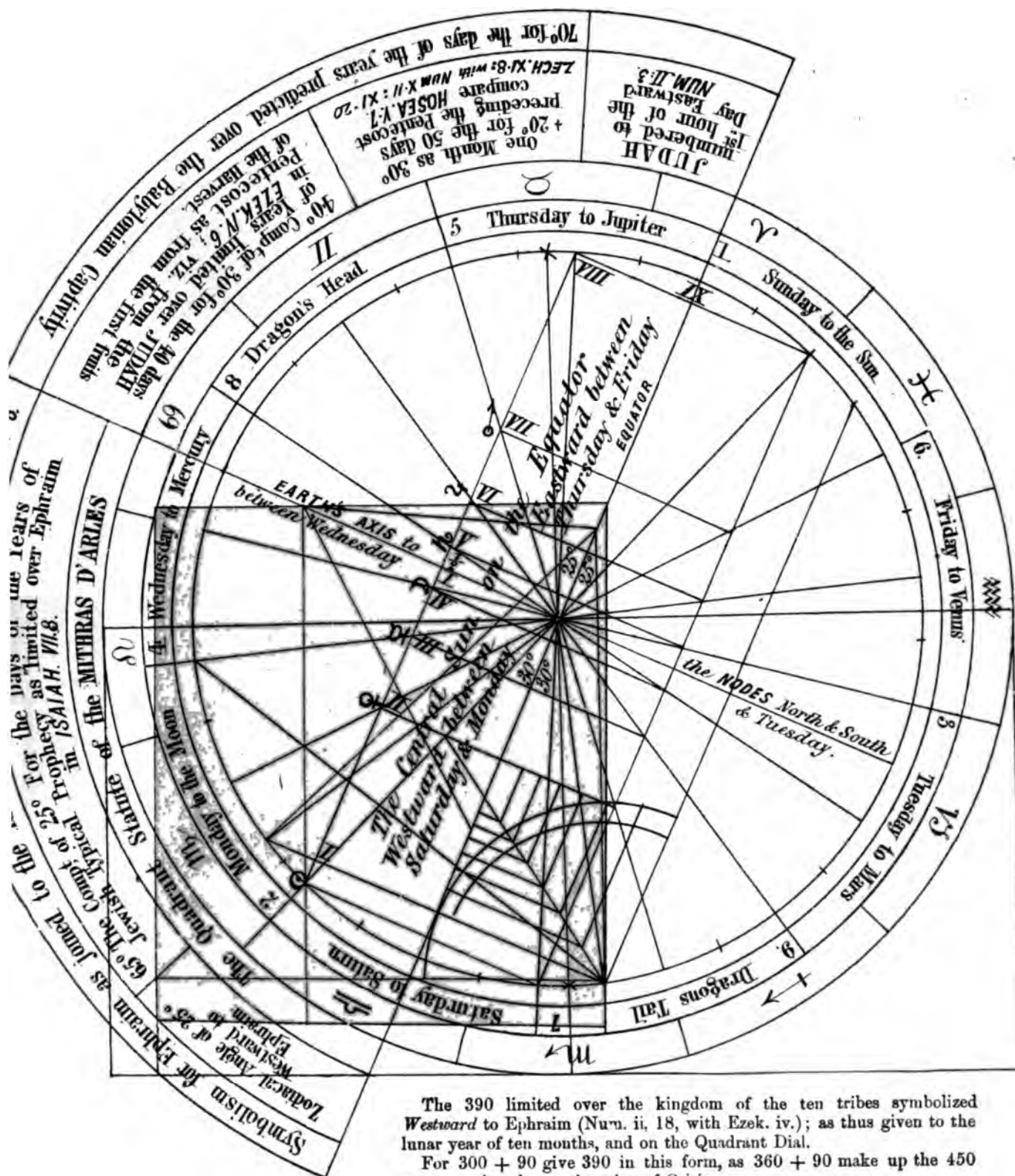
*Harmony of the Egyptian and Hindu Zodiacs in their relation to the structure and object of the
or their Drilling of the Pyramids and as a combination of the Greek Zodiacs and the
Dial and the*





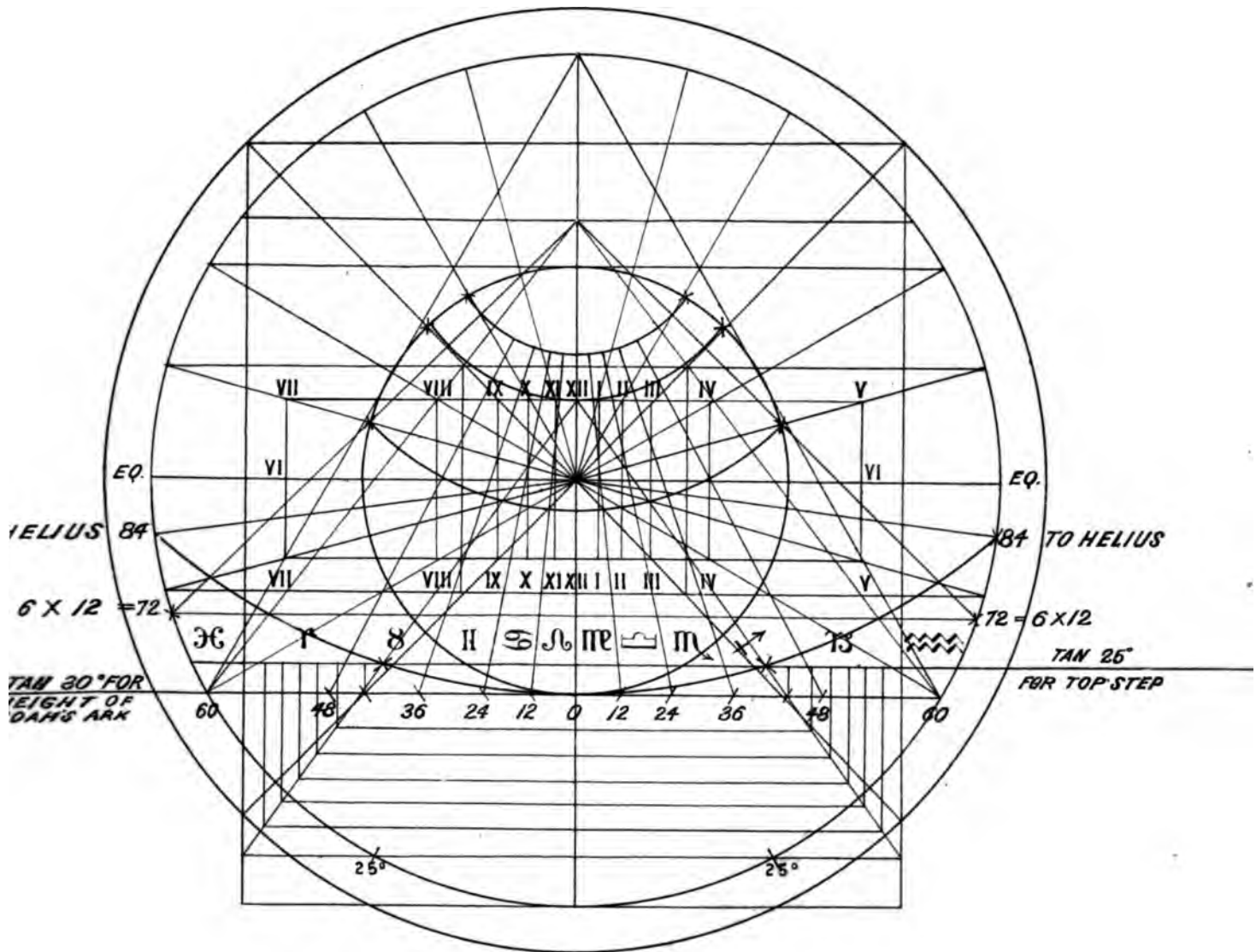






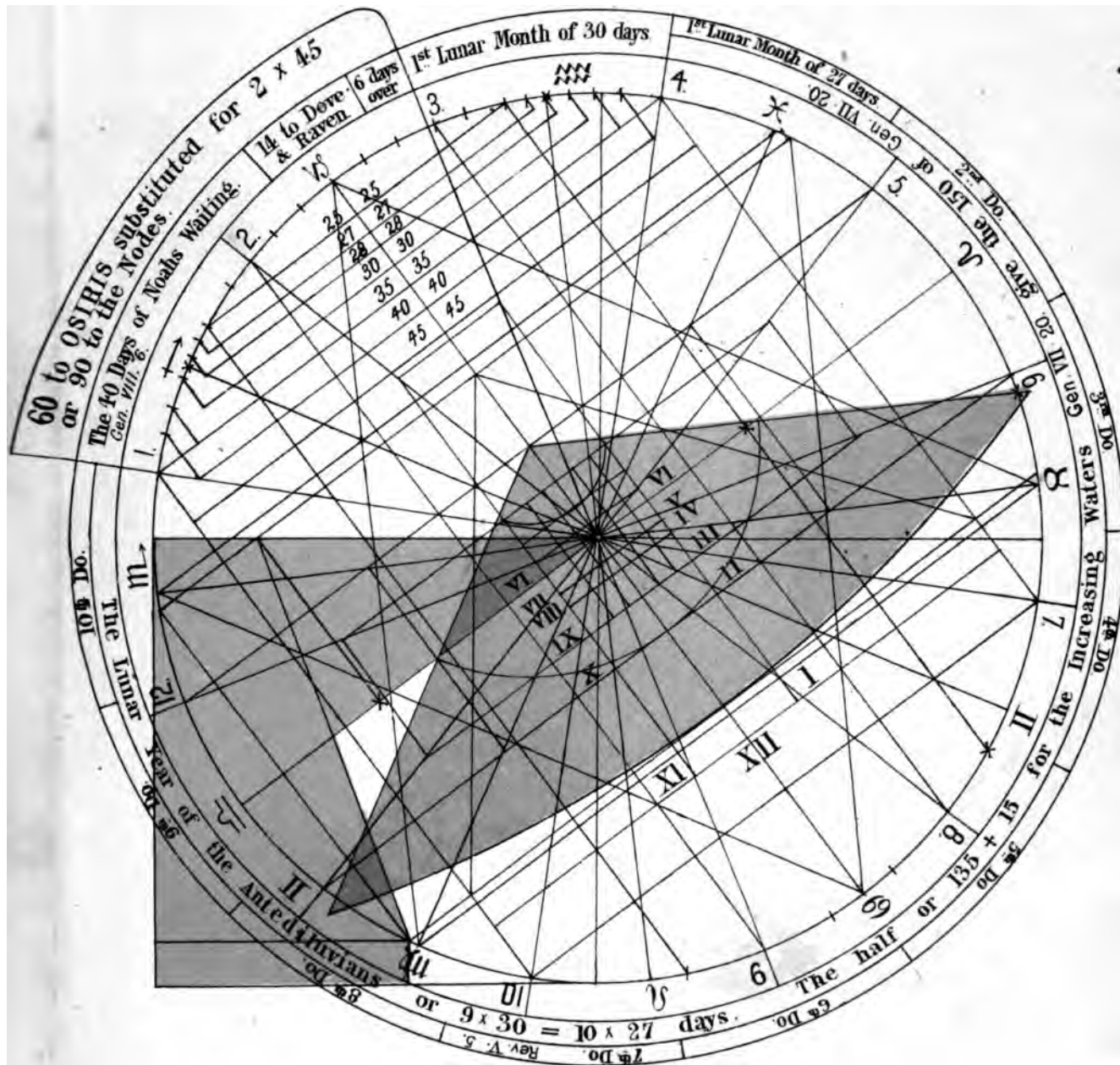


The Typical Structure of the Greek-Egyptian Dial with Steps, in Explanation of the Curves.



1st and Uppermost Curve cuts off from the Equinoctial $2 \times 150 = 300$ for 10×30 days.
 or $2 \times 135 = 270$ for 10×27 days.
 2d and Middle Curve cuts off ,, ,, 2×105 or $14 \times 15^\circ$ nearly as $12 \times 18^\circ$.
 3d and Lowest Curve cuts off } $10 \times 14 = 140$ for half of 280 or 10×28 days.
 2 x 84 to Helius, re- or 144 for 12×12 instead of 10×14 .
 ducible to, or 120 as $12 \times 10 = 8 \times 15$.

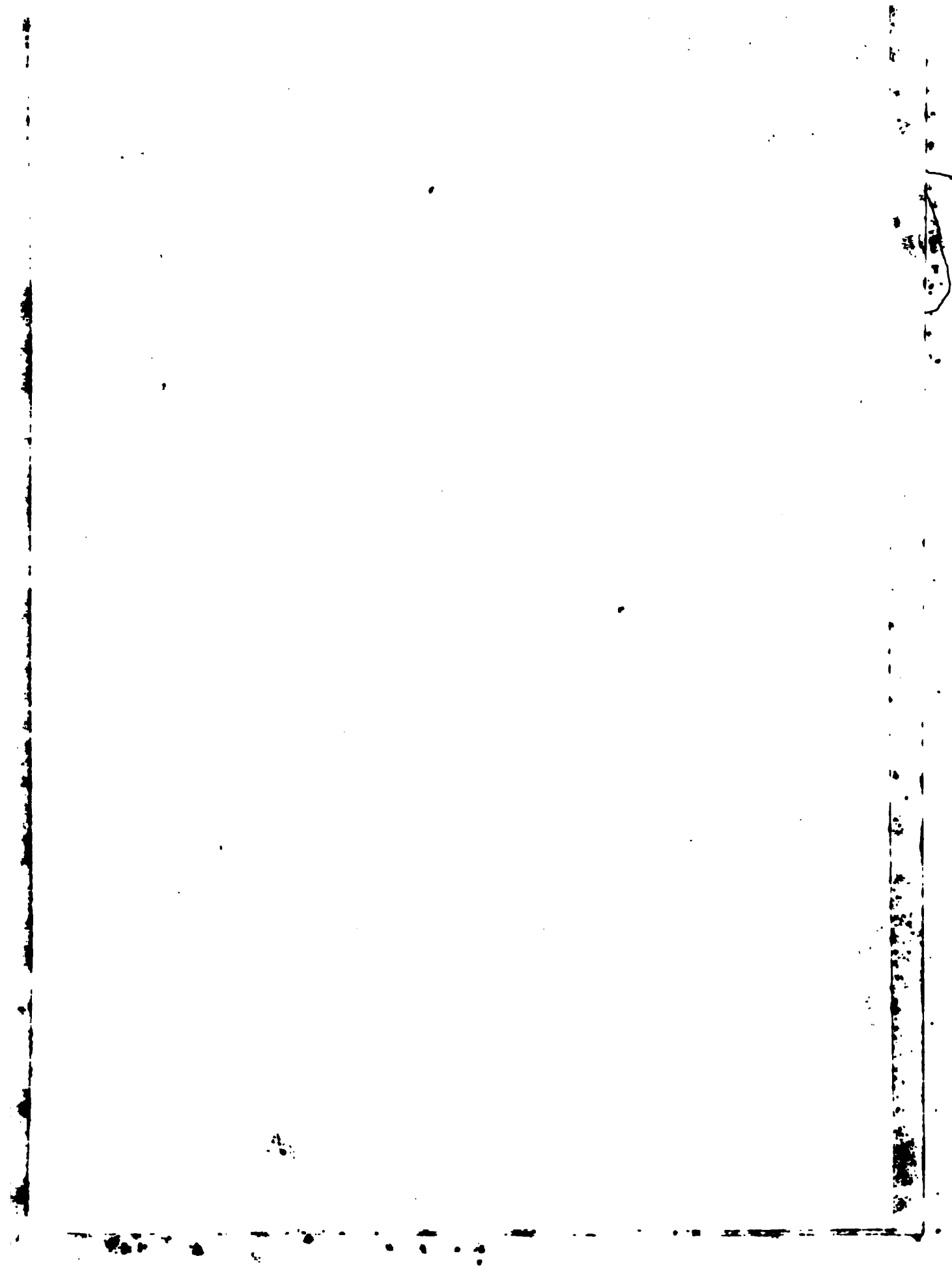
**CORRECTED MODE OF COMPARING THE FRONT AND SIDE MEASUREMENTS
OF A DIAL WITH STEPS,
For N. Lat. 54°, in Imitation of the Greek-Egyptian Dial with Steps, brought from Alexandria.**

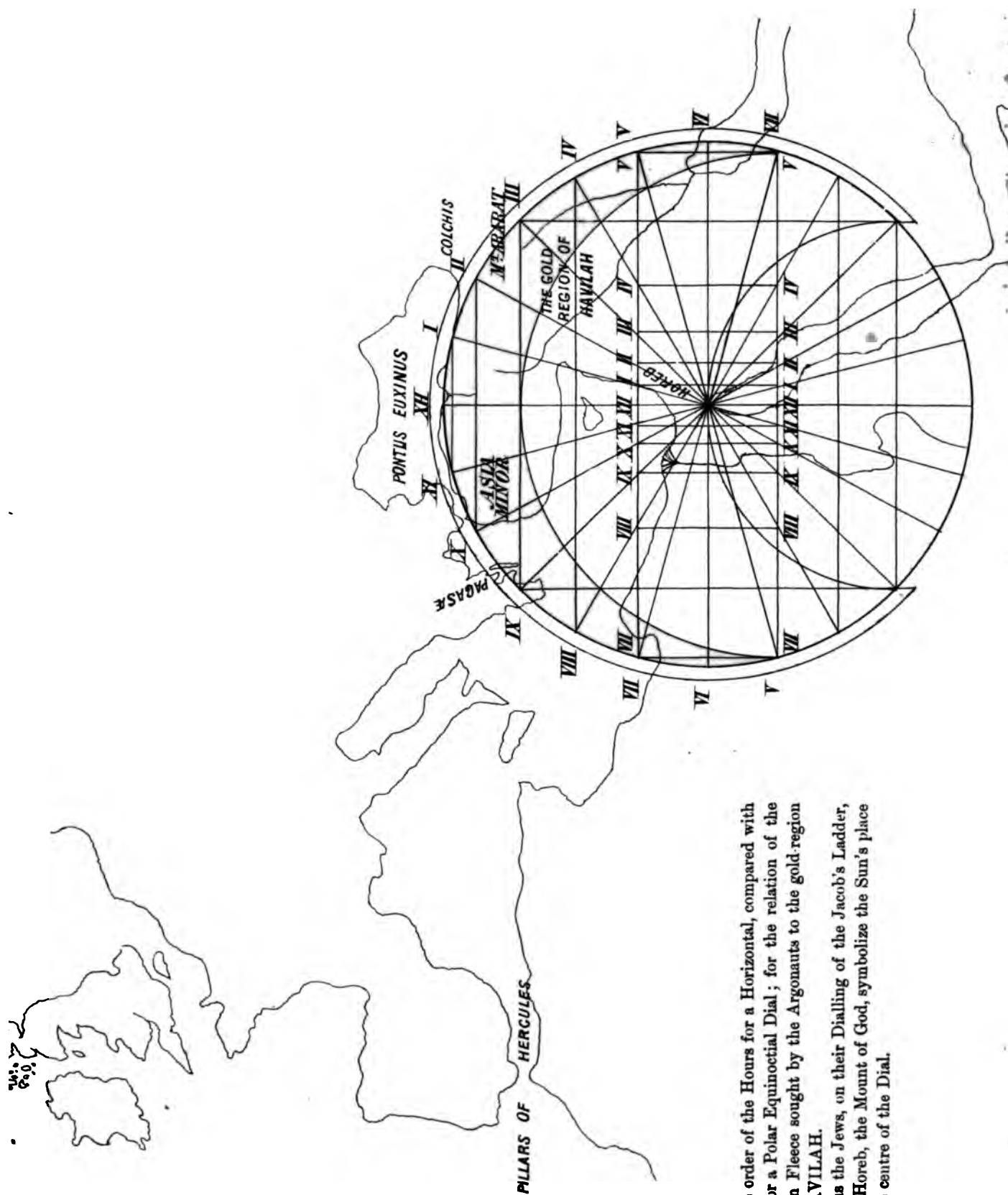


10 x 27 days, from the entrance of the Sun into Pisces to his exit from Scorpio, give nine old Chaldean months of thirty days to the first day of tenth month; whence we date the forty days of Noah's waiting, before he sent forth from his Ark the Raven and the Dove.

Thus that symbolism stands identified with the THOTH, or beginning of the old Egyptian year, from the full moon in Capricorn.

Note, also, that the lunar year of ten months, reckoned at twenty-seven days each, from 1° in χ to 30° in III symbolised the beginning and end of typical and prophetic time to Vishnu's ten Avatars, as beginning from the Sun in Pisces, and ending with Scorpio; even as the death of Hercules (supposed to be the Bala-Rama of the Hindus) proceeded from the poisoned blood of Hydra.

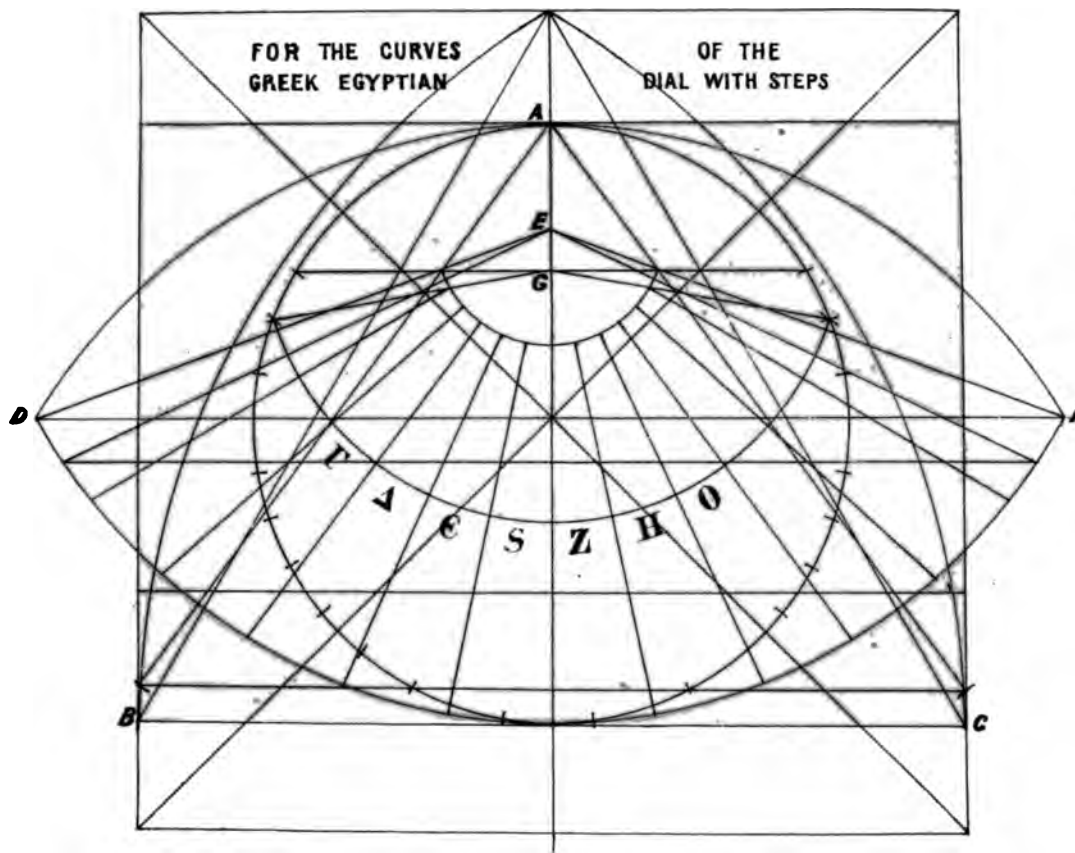




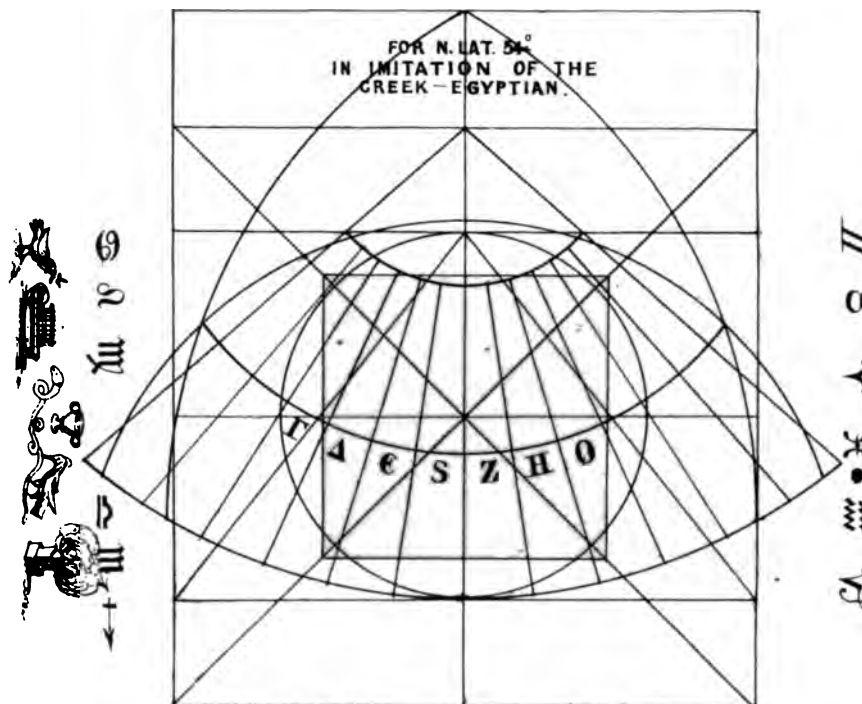
The order of the Hours for a Horizontal, compared with that for a Polar Equinoctial Dial ; for the relation of the Golden Fleece sought by the Argonauts to the gold-region of HAVILAH.

Thus the Jews, on their Dialling of the Jacob's Ladder, made Horeb, the Mount of God, symbolize the Sun's place on the centre of the Dial.

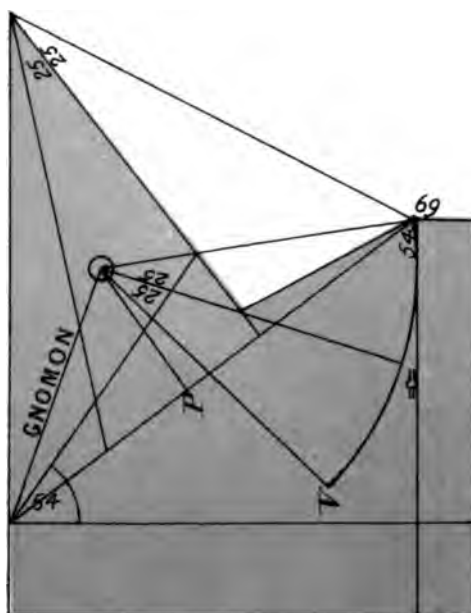
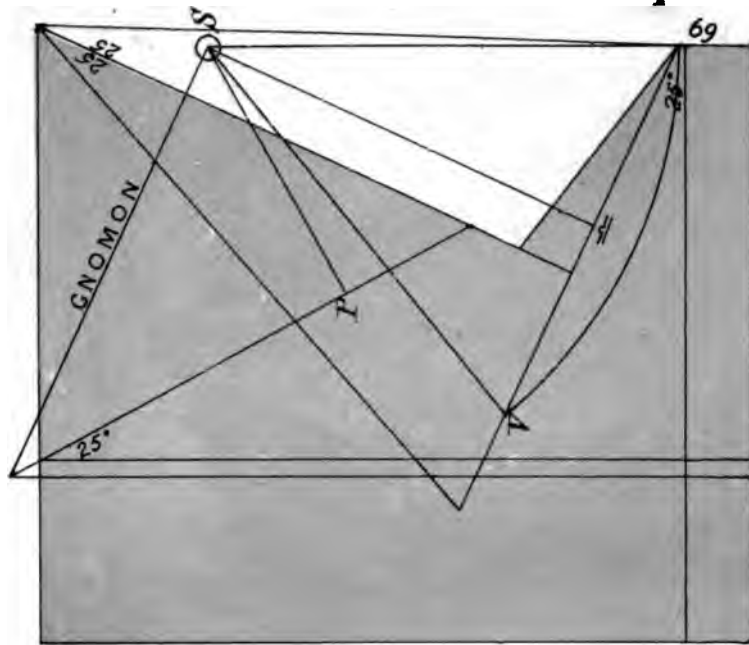
The shaded part represents the base of the Dial when standing *vertically*, for a bird's-eye form of the front view.



This front view was taken when the Dial was lying *horizontally* on its back.

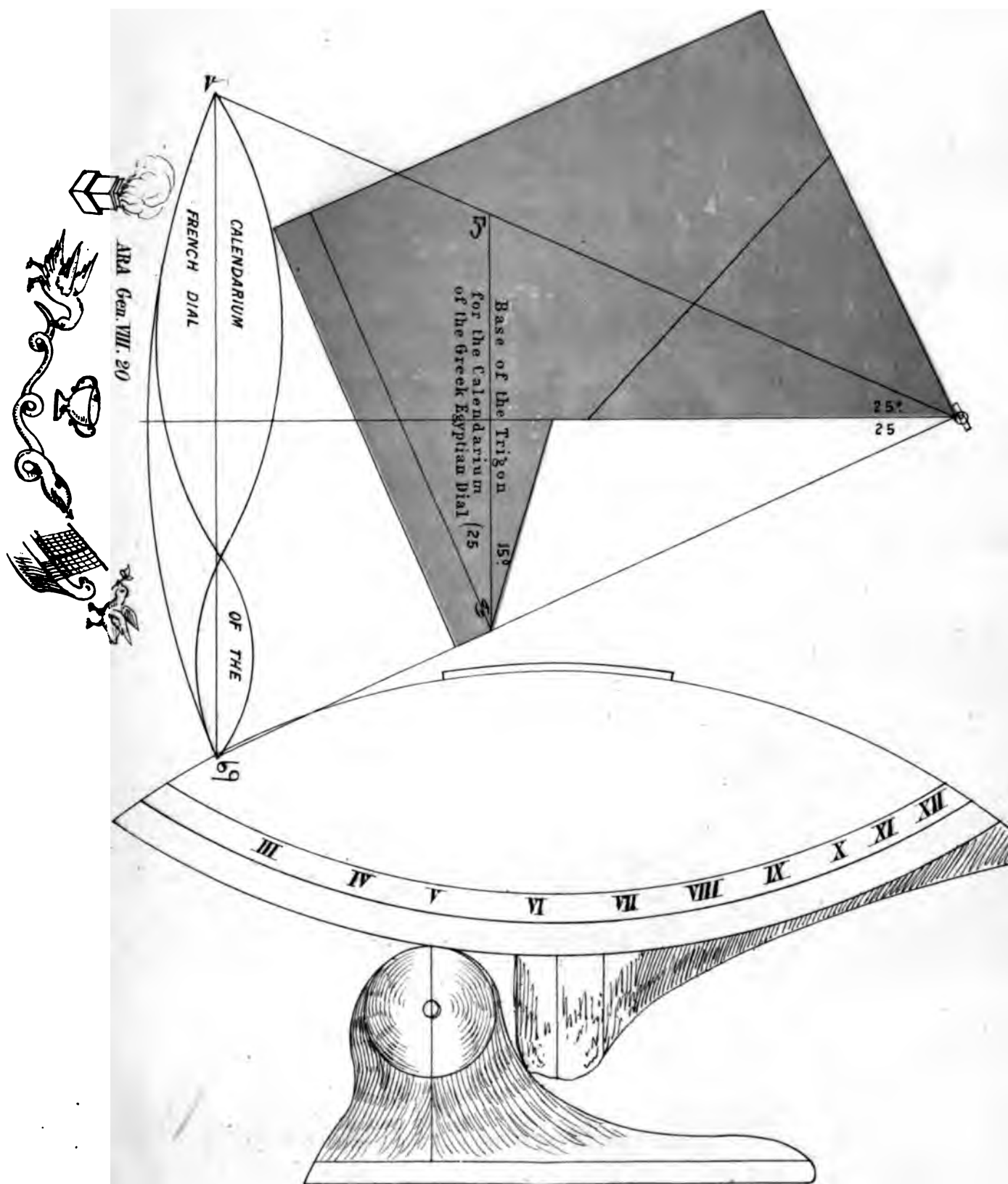


From the Model made for the Industrial Exhibition in 1866. The coloured square represents the relation of their four-square City of Light to the equinoctial of an East and West or Polar Dial.



Direction & height of Gnomon given on a West side view.

**THE CALENDARIUM ON THE GREEK-EGYPTIAN DIAL WITH STEPS, COMPARED WITH
THAT OF THE CHRONOMÈTRE SOLAIRE, INVENTED AND PATENTED BY M.
FLECHET, AT PARIS.**

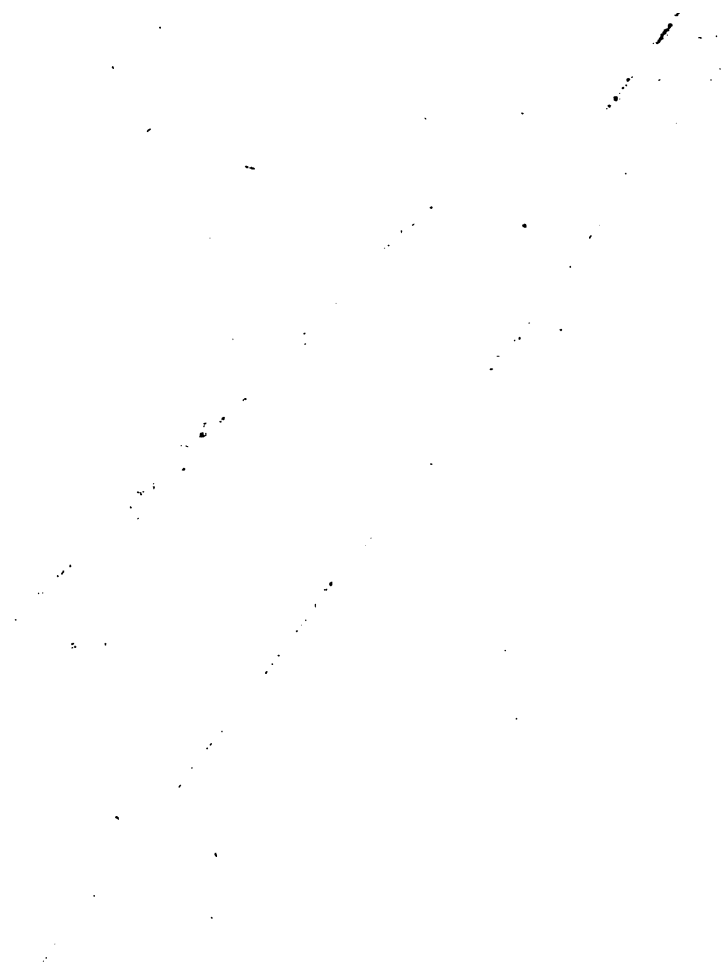


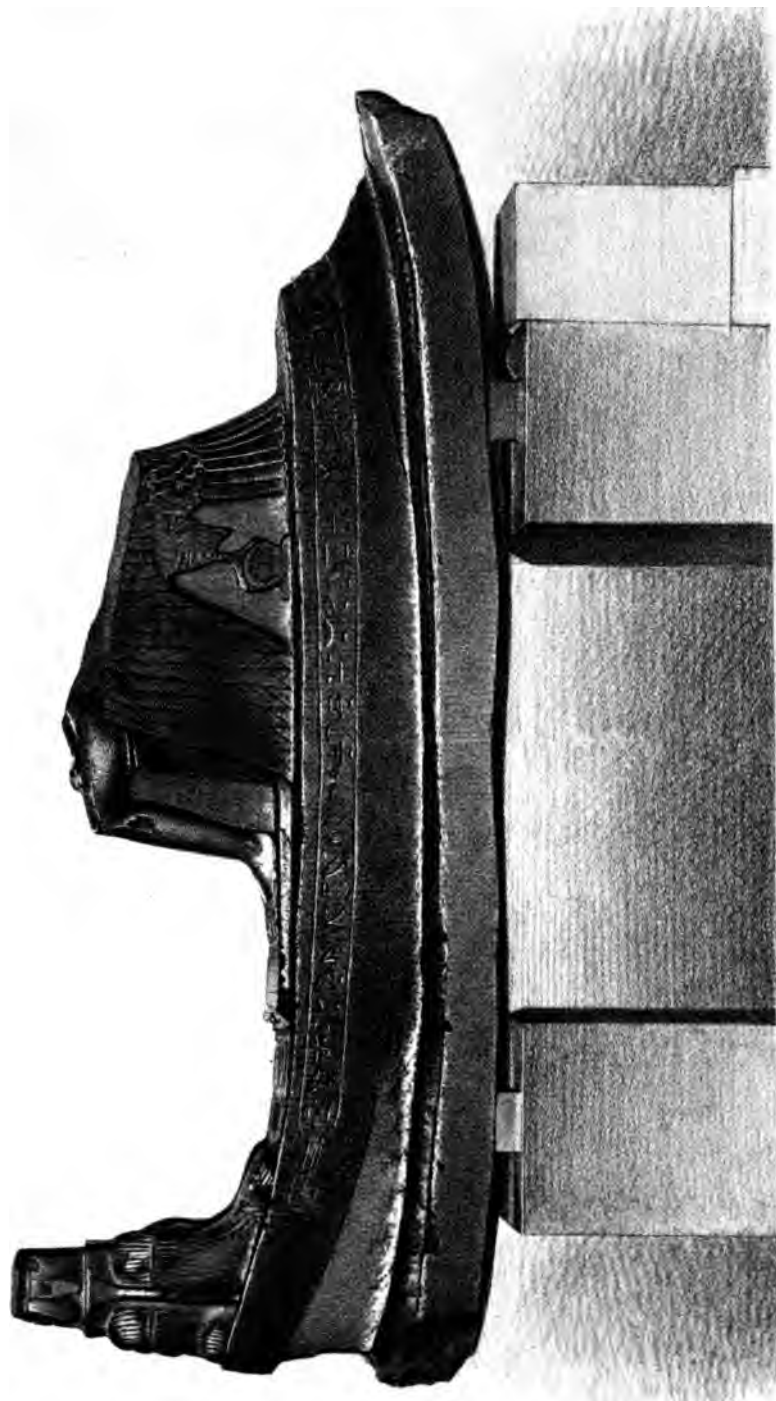
राशःचक्र



RĀSI CHAKRA

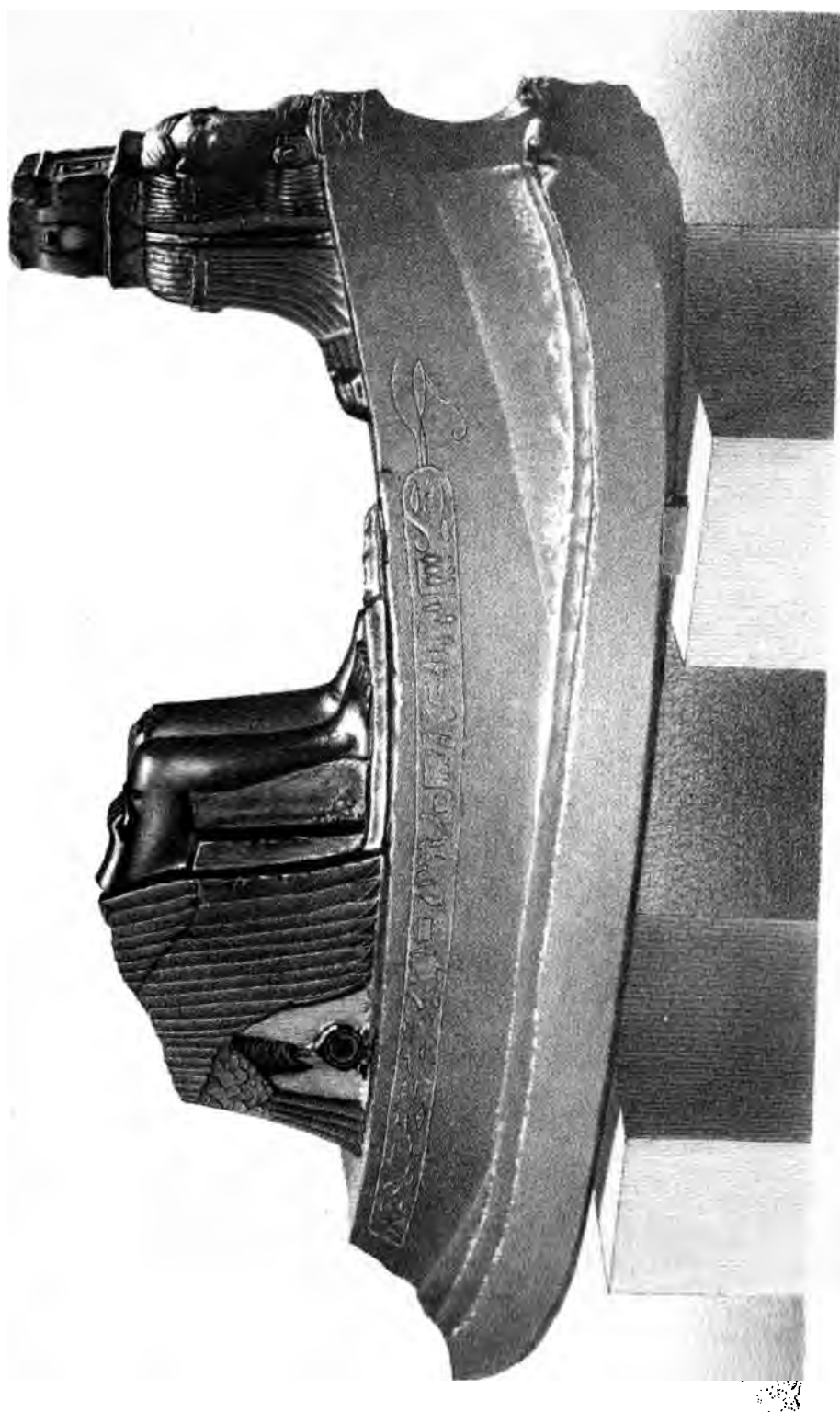
The HINDU ZODIAC, and SOLAR SYSTEM
from Moor's Hindu Pantheon





THE BARIS, OR SACRED BOAT OF THE EGYPTIANS.

From the British Museum.



THE BARIS OR SACRED BOAT OF THE EGYPTIANS.

from the British Museum.



MITHRAIC GROUP.

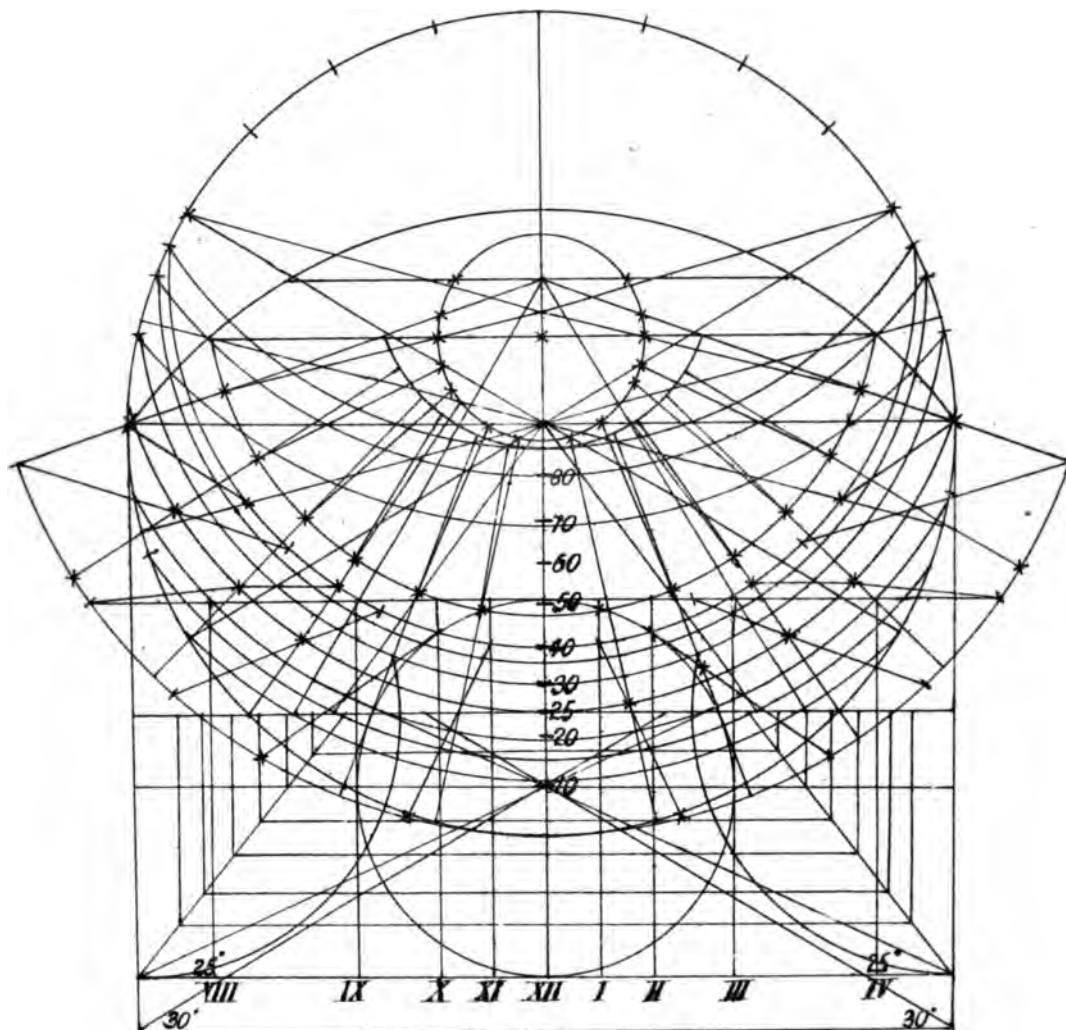
From the British Museum



MITHRAIC GROUP WITH FIGURES REPRESENTING DAY & NIGHT.

from the British Museum.

**THE ALEXANDRINE DIAL WITH STEPS, ON A FRONT VIEW,
Compared with a Hollow South Vertical for N. lat. 25°, constructed according
to Fale's Rule.**

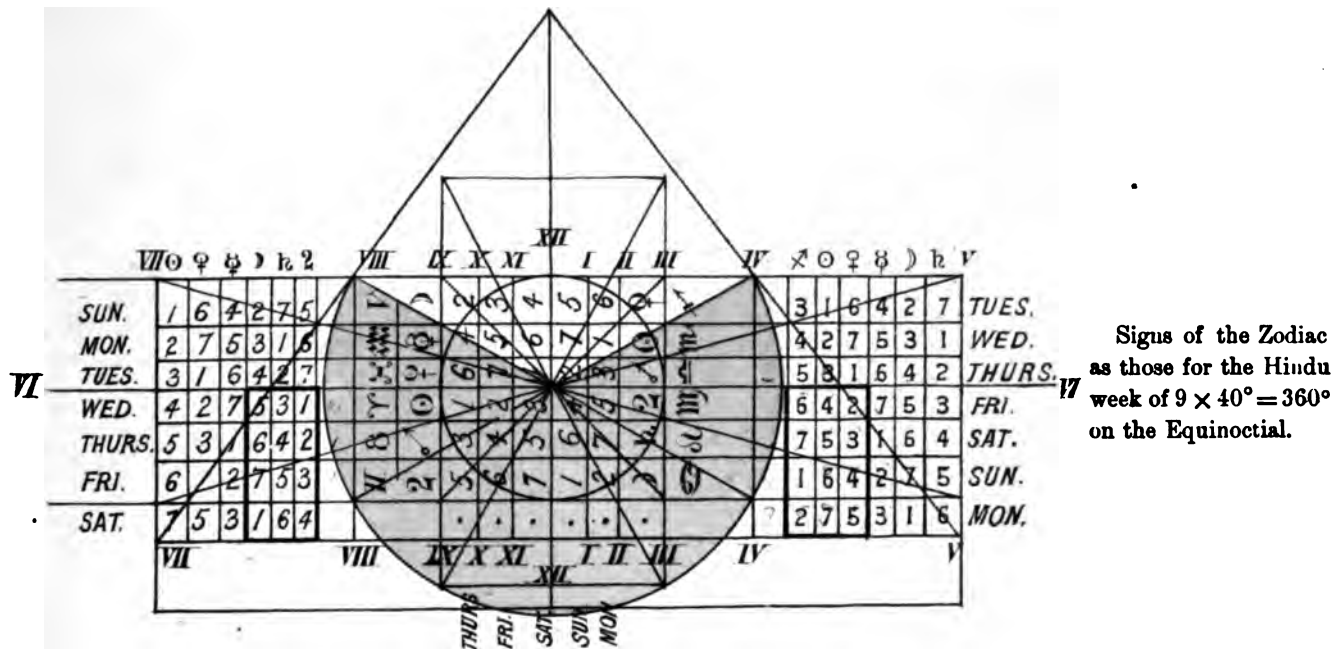


Though the typical features of these *three* Symbolisms will hold good, the division of the steps thereon to the Equinoctial is (I now think) faulty on all ; as calculated for that radius of the Equinoctial by which I then determined *hypothetically* the direction and height of the Gnomon in each case. For this reason I have let them stand as illustrations, though not without this qualification,—that the radius for the small Equinoctial of the Polar Dial on the Front Steps must be the half of 83° or 84° to Helius—substituted for 45°, the half of 90°

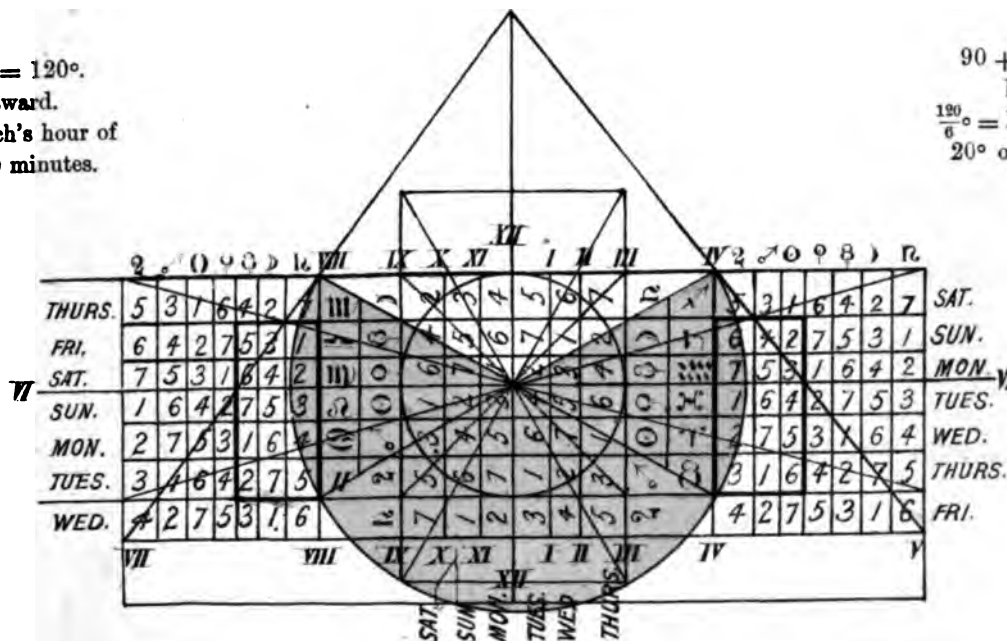
THE STEPS OF THE GREEK-EGYPTIAN DIAL,

Numbered to the different Oriental forms of Calendaring the Days of the Week to the Hours of the Day.

- 1st, As beginning between Thursday and Friday, when reckoned Southward to the Descending Node, from the Sun's third gate, as by the Fakeers.
 - 2d, As beginning from Sunday, when turning Northward from the Sun's fourth gate of Enoch's Astronomy, as made the beginning of typical time by the Sittaanders.
 - 3d, Probably the Egyptian variation of No. 1, associating Wednesday as dedicated to Mercury (the Caduceus bearer of Jupiter), with the Lunar Calendarium of their Noah's Ark Symbolism, $4 \times 2 = 8$ hours to the centre of the Dial; for $\frac{190}{8} = 15^\circ$ to an hour of Equinoctial time.
- $7 \times 6 = 42$, for 7 weeks of 6 days twice numbered, viz., Eastward and Westward on the side steps; by substituting the Egyptian Quadrant of 84° (as $2 \times 42 = 3 \times 48$ and 7×12), for the old Chaldean Quadrant of 90° .



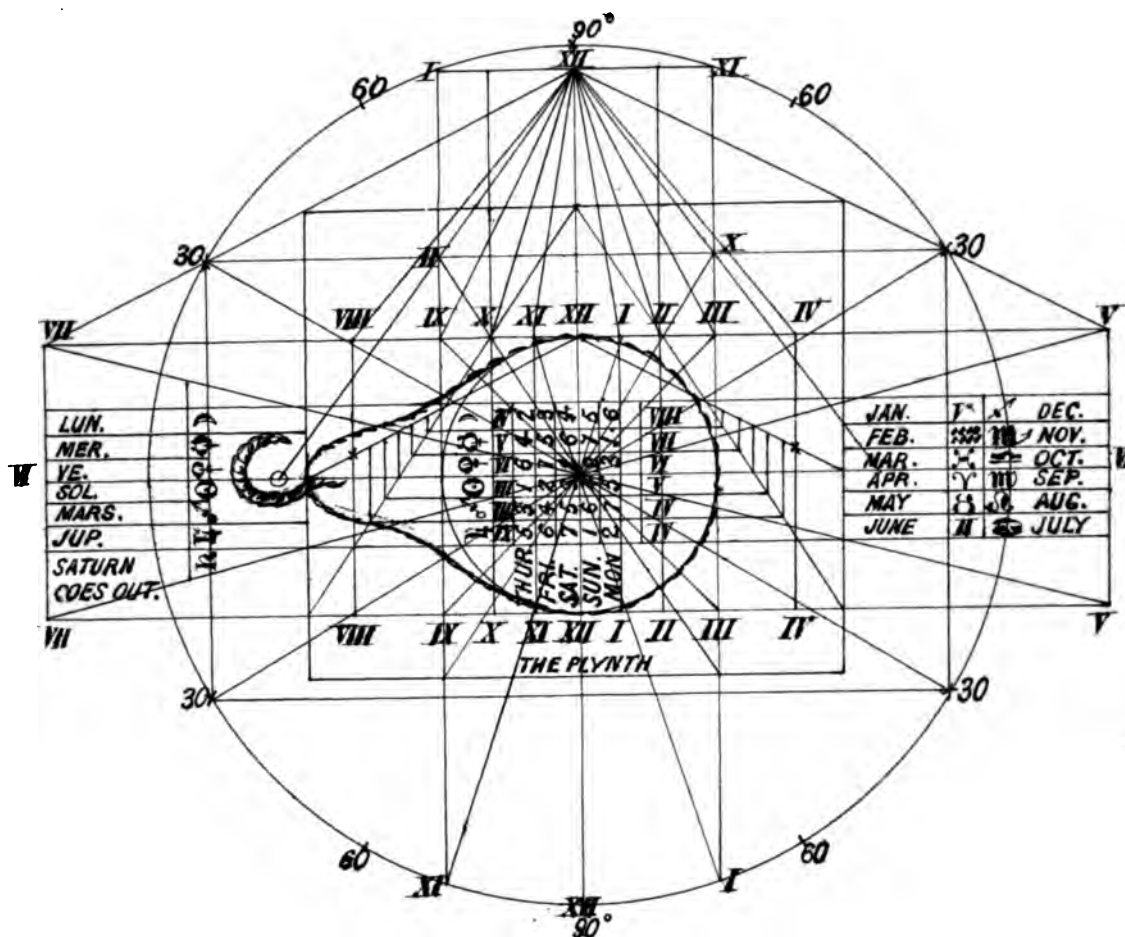
$90 + 30 = 120^\circ$.
Westward.
 $\frac{120}{6} = \text{Enoch's hour of}$
 20° or 80 minutes.



$90 + 80 = 120^\circ$.
Eastward.
 $\frac{120}{6} = \text{Enoch's hour of}$
 20° or 80 minutes.

Thus the days of the week are numbered to the Planetary hours for morning and evening, as by Blundevil for the week of seven days, beginning from SUNDAY.

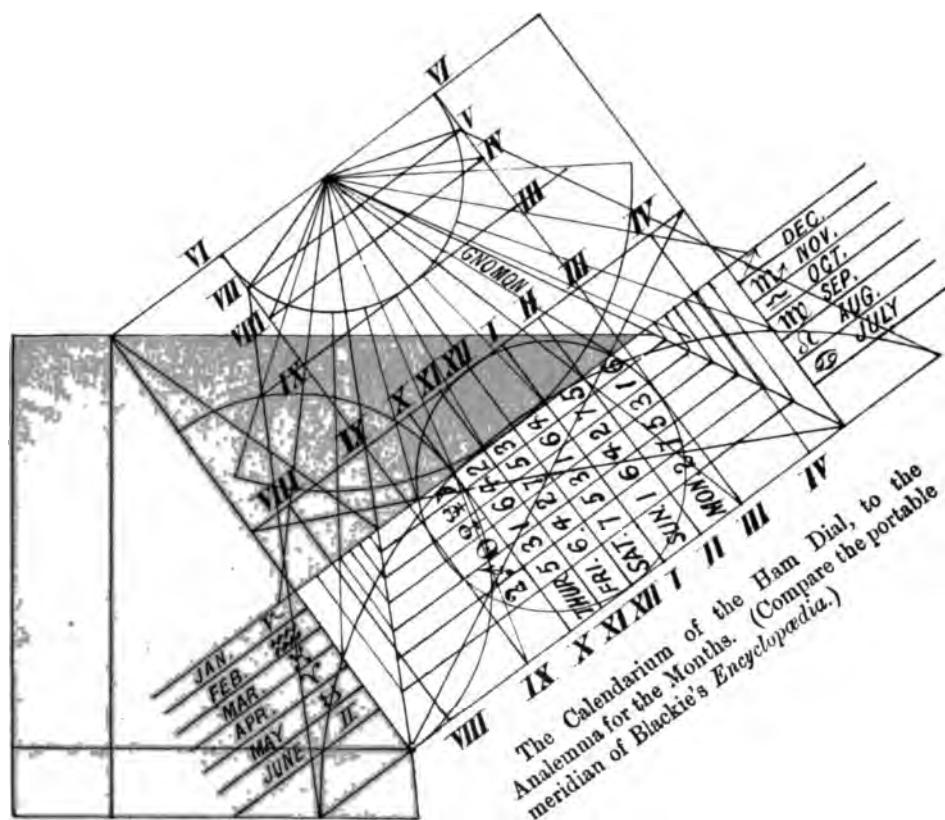
But they are numbered in cycles of 5, 6, or 7 to the Monthly Calendarium on the Centre, as to 6 cycles of 5, multiplied by 5 for 150, or half of 300 on the Calendarium of the Ham-shaped Dial.



The 30 Cubits for the whole height of Noah's Ark, measured typically as Degrees of the Circle to the Boat Dialling of the Ancient Orientals.

Compare *this Dialling with Steps* for Whitby, N. lat. 54°, with the ancient Sun-Dial in the shape of a Ham, numbered 1568 in Knight's *Pictorial Gallery of Arts*, and the Sun-Dial with Portable Meridian in Blackie's *Popular Encyclopædia*, with the *Greek-Egyptian Dial with Steps* of the era of the Ptolemies, brought from the base of the Obelisk called Cleopatra's Needle, at Alexandria, and presented to the British Museum by John Scott Tucker, Esq.

N.B.—This Calendarium seems to prove what the Greeks meant by Jupiter dethroning Saturn, in their Cosmogony dating "a Jove principium."



Relation of the West Side to the Front View of a Dial with Steps for Whitby (N. lat. 54°), in imitation of the Greek-Egyptian Dial with Steps, brought from Alexandria, and now in the British Museum. (Compare Herodotus, respecting the West End of the Temple of Vulcan, built by Rhampsinitus.)

Psalm 1. v. 1,—“The mighty God, even the Lord, hath spoken, and called the earth from the rising of the sun to the going down thereof.” Compare Isaiah lix. 9, Matt. viii. 11, with Zech. xiv. 7, 8, in illustration of Gen. xxviii. 14, Psalm lxxv. 6.

Illustration for the Days of the Week; as differently numbered to the Equinoctial, on the two Zodiacs of the Hindus.

Enoch's Eastern Gates of the Sun.	<div>Benjamin.</div> <div>Judah to (Numbers ii. 2.) with Gen 1-14 Sunrise</div> <div>Issachar.</div> <div>Zebulon.</div> <div>Reuben, 1st born near the NORTH of the Egyptians</div> <div>Simon.</div>					
	1	2	3	4	5	6
	9. FRI.	8. SAT.		7. MON.	6. TUES	
The old Egyptian week of 8 days, from that of 9 days, as 8 × 45 = 360°.	2. THURS.	3. N.D.		4. N.A.	5. WED	
	1	2	3	4	5	6
	III	II	III	Ω	Θ	II
Enoch's Western Gates of the Sun.						Manasseh.
						Ephraim to West. Num- bers ii. 18, and turn- ing back in the day of battle. Psalm lxxviii. 9.
						DAN. The Judge. Gen. xlix. 16, Rev. v. 6.
						Asher.
						Naphthali to South-West Deut. xxxiii. 23, Josh. xix. 34.
						Gad, a troop. Compare Rev. ii. 9, and ix. 10.
Enoch's Eastern Gates of the Sun.	<div>Manasseh.</div> <div>Ephraim to West. Num- bers ii. 18, and turn- ing back in the day of battle. Psalm lxxviii. 9.</div> <div>DAN. The Judge. Gen. xlix. 16, Rev. v. 6.</div> <div>Asher.</div> <div>Naphthali to South-West Deut. xxxiii. 23, Josh. xix. 34.</div> <div>Gad, a troop. Compare Rev. ii. 9, and ix. 10.</div>					
	6	5	4	3	2	1
	8. ASC. NODE	5. THURS.	1. SUNDAY	6. FRI.	3. TUES	
Our week of 7 days from that of 9 days, as 9 × 40 = 360°.	8	4. WED.	2. MONDAY.	7. SAT.	Θ DESC. NODE	3
	6	5	4	3	2	1
	Θ	Ω	III	II	III	↗
Enoch's Western Gates of the Sun.						

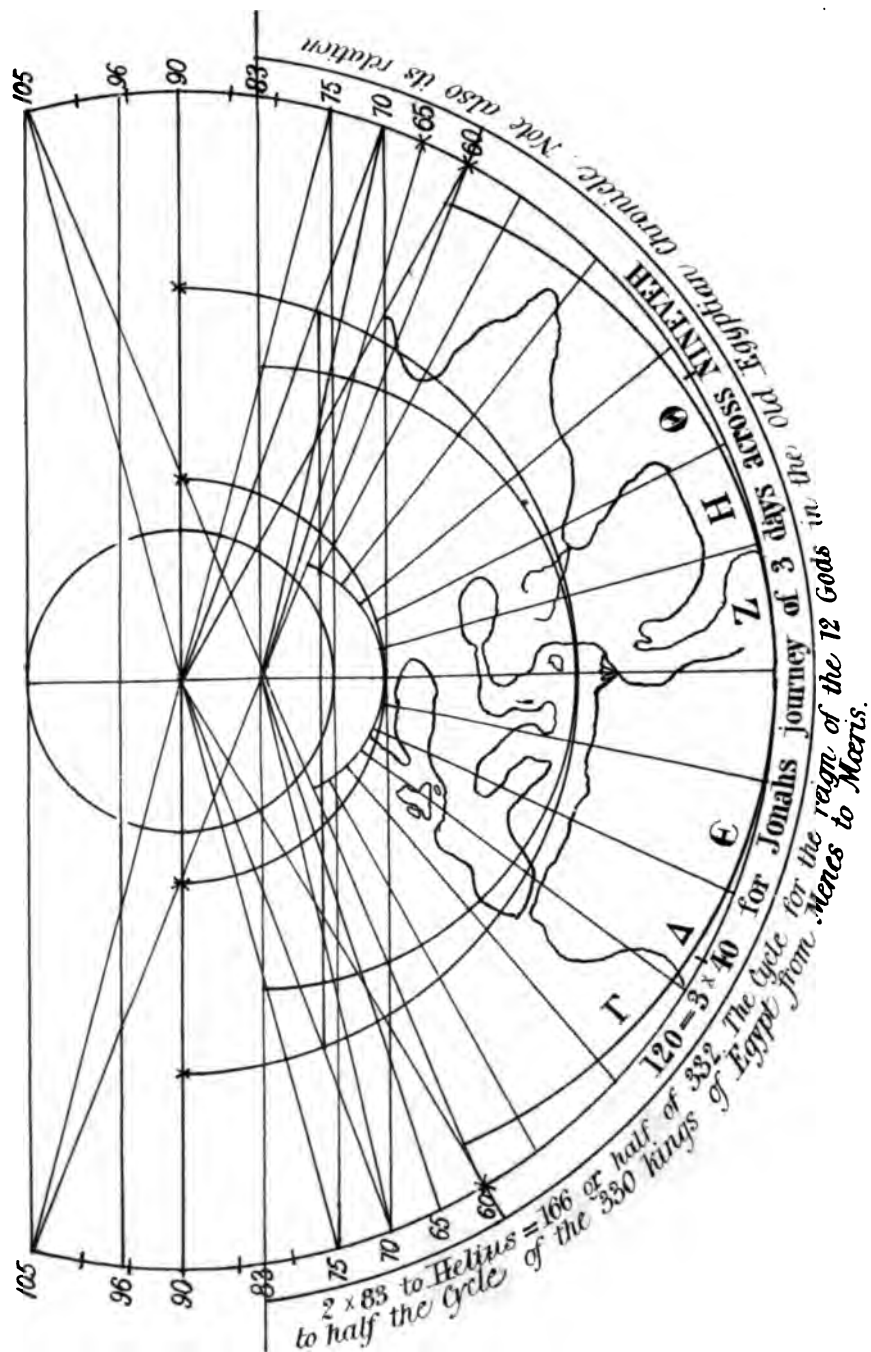
This second form of the week (by giving the North Ecliptic to the Western Horizon) reverses the typical ordering of the tribes, as numbered to the 4 Cardinal points of the horizon by Moses.

May not this have something to do with the light affliction of Zebulon and Naphtali, Isaiah ix. i, compared with the total darkening of their typical Heavens, when passing away, (with the typical dispensation of Moses,) under the judgment predicted over the Anti-christian Jewish Church of the Apostolic age? (Dan. xii. with Matt. xxiv.)

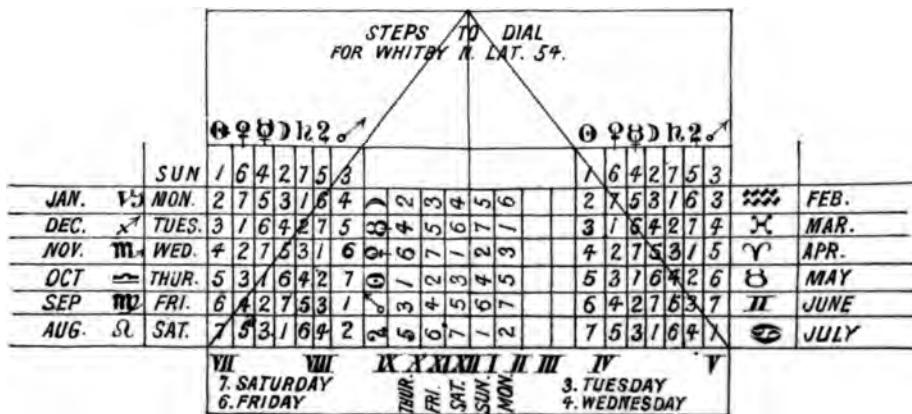
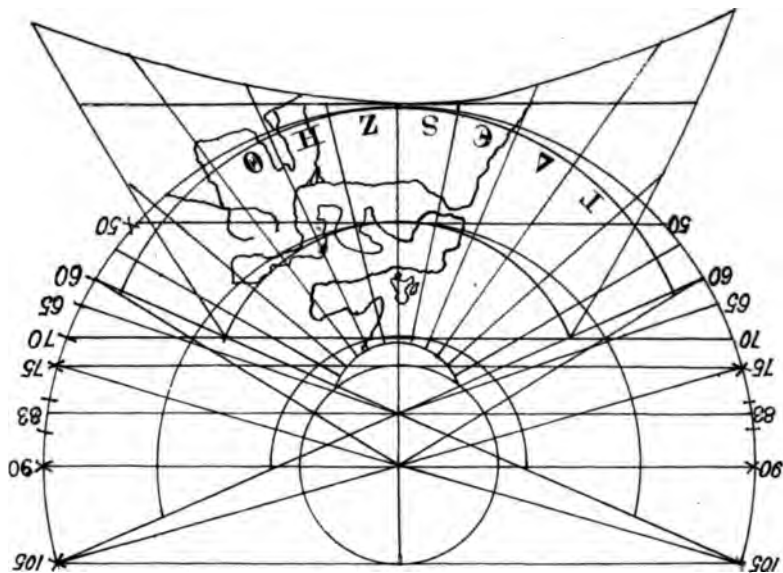
Compare their order of march, Num. ii. 7, with that of ascending and descending light, as numbered to the Central SUN, on their East and West Dialling. This, moreover, illustrates Zech. xiv. 4, from Deut. xxviii. 12, 13; whence the imagery used in the Parable of Dives and Lazarus.

East to South for Descending Node. Judah to East.	Levites with Tabernacle.	West to North for Ascending Node. Ephraim, DAN, West. North.
Reuben to South.		

THE CURVES AND RADIATING HOUR-LINES OF THE GREEK-EGYPTIAN SUN-DIAL WITH STEPS.



The Curves of the Greek-Egyptian Sun-Dial with Steps, applied to the construction of a similar Dial for Whitby. N. Lat. 54° .



Signs of the Zodiac, arranged to the Analemma as on the Zodiac of Tentyra.

DIALLING DEFINITIONS FROM "CHAMBERS'S ENCYCLOPÆDIA."

The *Polar Dial* is inclined to the horizon in an angle equal to elevation of the pole.

An *Upper Polar Dial* only differs in situation, and the manner writing the hours, from *East* and *West Dials*, joined together in the line of six o'clock.

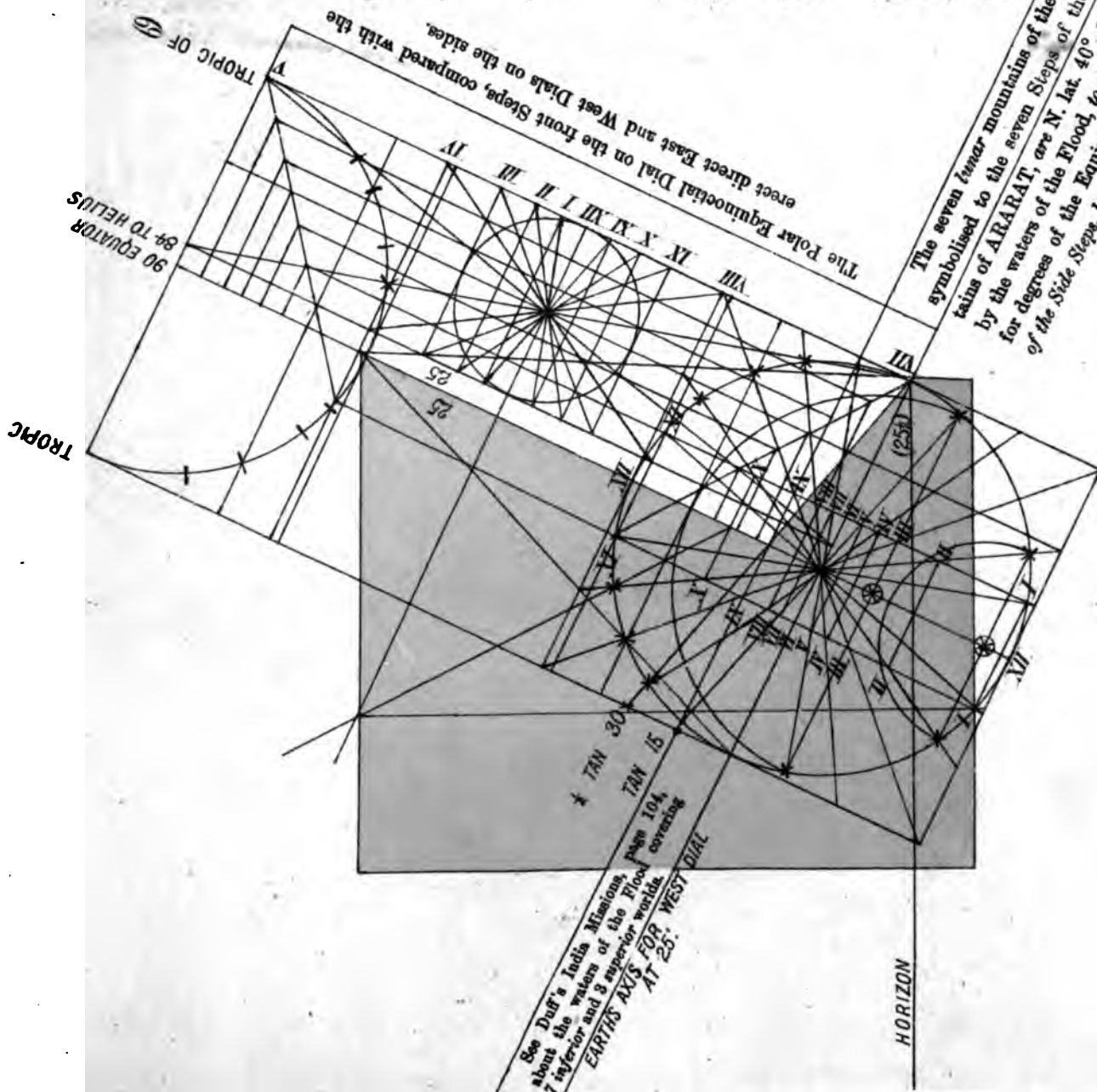
A *Lower Polar Dial* is had by putting out the hours of the noon, 9, 10, and 11, and those of the afternoon, 1, 2, 3, with the noon hour of 12 itself; and only leaving hours 7 and 8 of the morning, and 4 and 5 in evening.

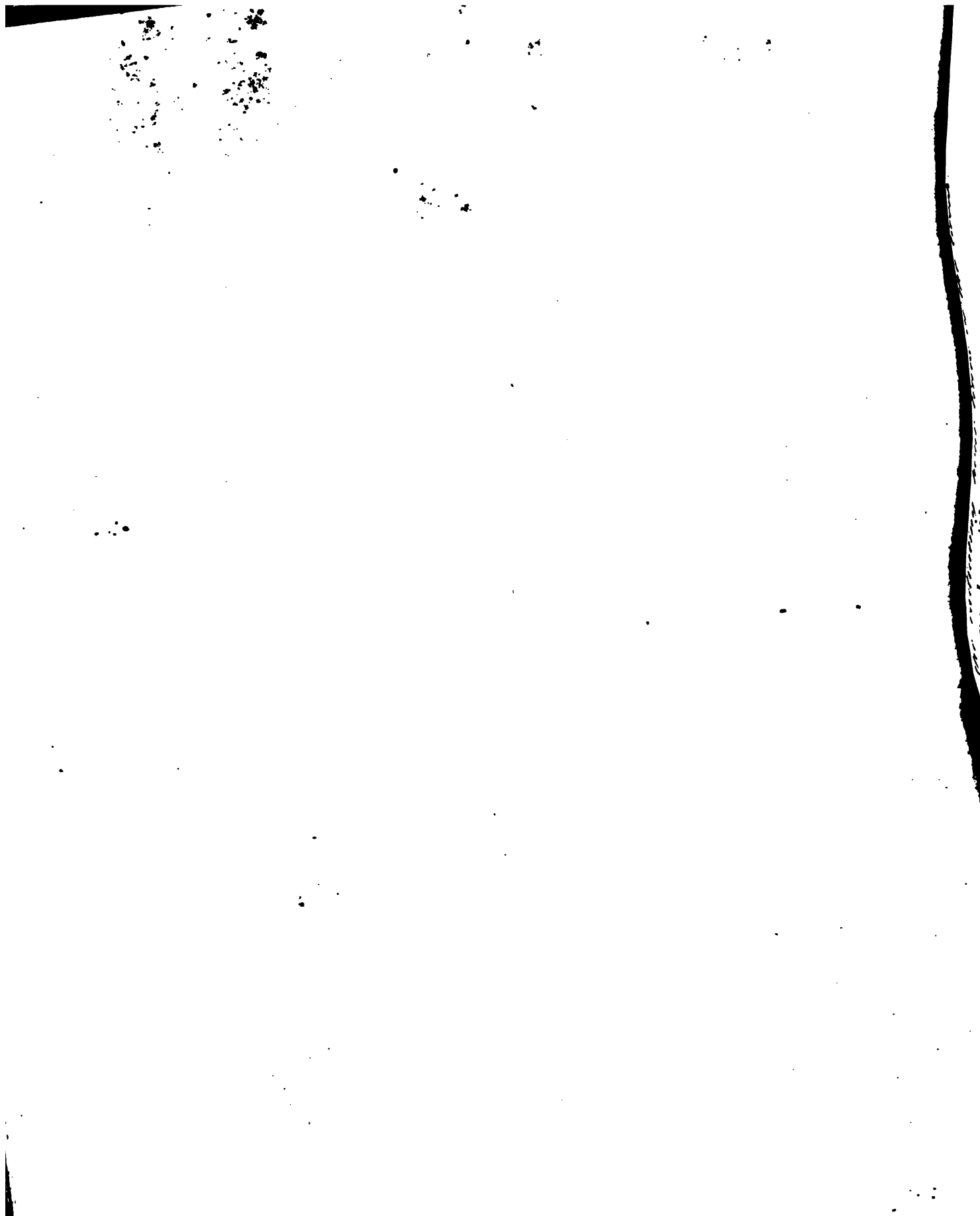
N.B.—The seven inferior worlds of this symbolism are the orbs, or parallels of latitude for a diurnal arc of 210°, in Pyramid plain.

The three superior worlds are the difference between that diurnal arc of 210°, and the old lunar year of 300 days, or 10 × 30 the Equinoctial.

Up to this time I have always been in error, by numbering diurnal arc of 210°, and the lunar year of 300°, to the light side the Dial, so as to throw the difference of 60° or 150° to dark behind the Dial. This has caused me much embarrassment. Zodiac of Tentyra proves that the ancient Egyptians placed; the account of lunar light, obscured by the Sun's daily meridian yearly solstitial splendour.

The seven lunar mountains of the great Diana's throne, symbolised to the seven Steps of the Dial, as the mountains of ARARAT, are N. lat. 40°; or 25 + 15°; covered by the waters of the Flood, to the extent of 15 cubits; for degrees of the Equinoctial measured to the height of the Side Steps, by $\frac{1}{4}$ Tan 30°.





DIALLING DEFINITIONS FROM "CHAMBERS'S ENCYCLOPÆDIA."

The *Polar Dial* is inclined to the horizon in an angle equal to the elevation of the pole.

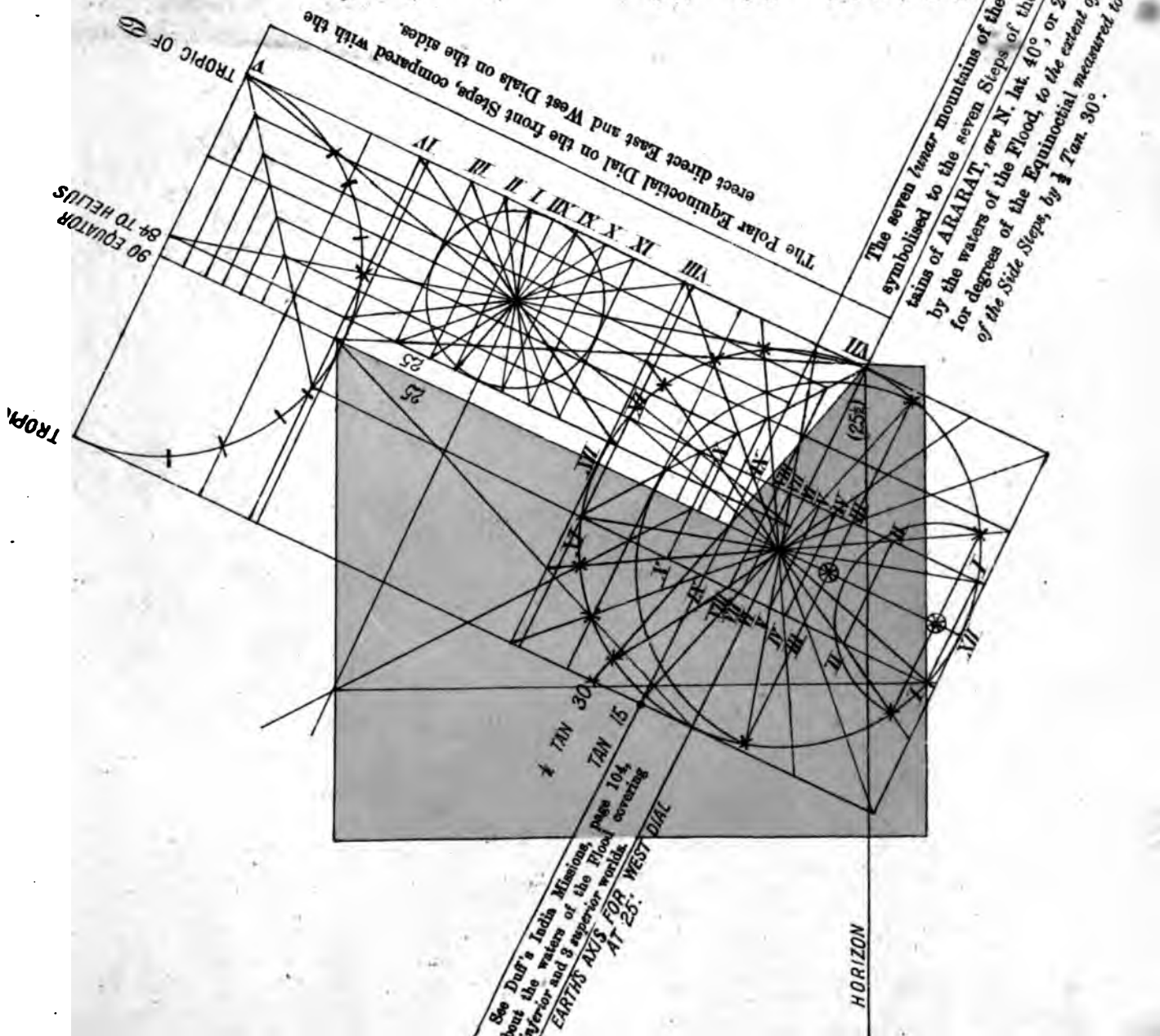
An *Upper Polar Dial* only differs in situation, and the manner of writing the hours, from *East* and *West Dials*, joined together in the line of six o'clock.

A *Lower Polar Dial* is had by putting out the hours of the forenoon, 9, 10, and 11, and those of the afternoon, 1, 2, and 3, with the noon hour of 12 itself; and only leaving the hours 7 and 8 of the morning, and 4 and 5 in the evening.

N.B.—The seven inferior worlds of this symbolism are the seven orbs, or parallels of latitude for a diurnal arc of 210° , in the Pyramid plain.

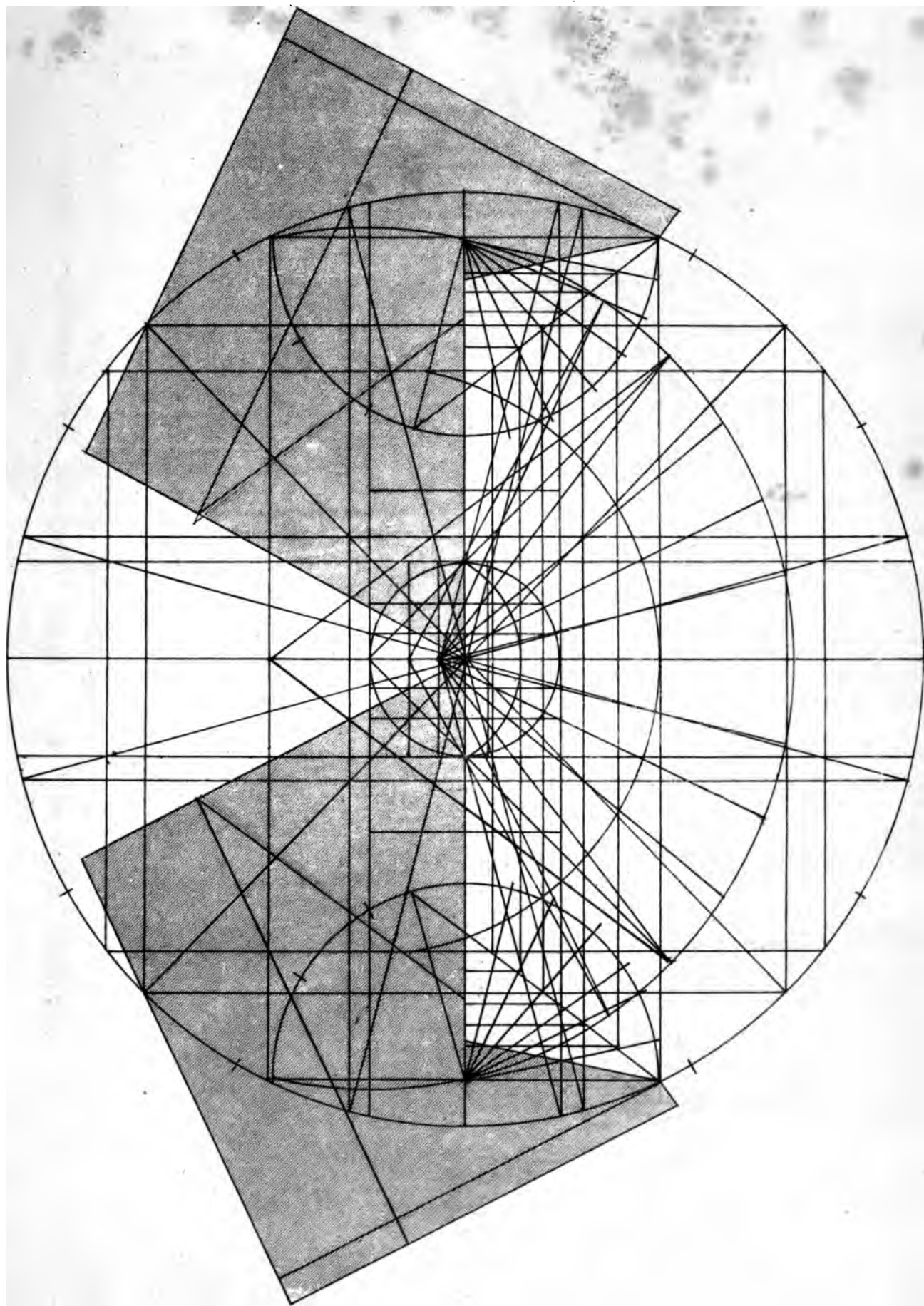
The three superior worlds are the difference between that diurnal arc of 210° , and the old lunar year of 300 days, or $10 \times 30^{\circ}$ on the Equinoctial.

Up to this time I have always been in error, by numbering the diurnal arc of 210° , and the lunar year of 300, to the right side of the Dial, so as to throw the difference of 60° or 160° to darkness behind the Dial. This has caused me much embarrassment. The Zodiac of Tentyra proves that the ancient Egyptians placed it to the account of lunar light, obscured by the Sun's daily meridian and yearly solstitial splendour.

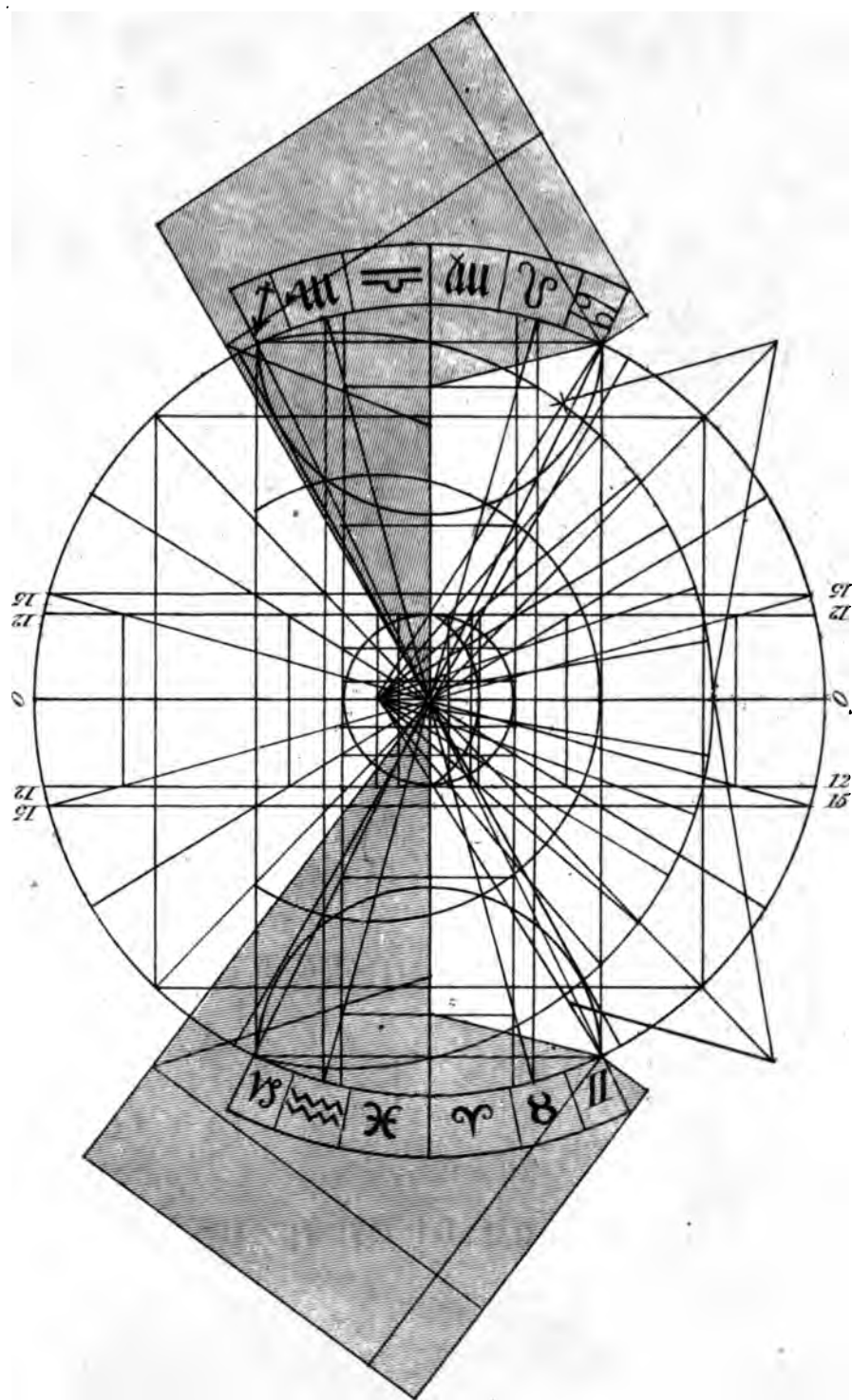


Relation of the Egyptian Decree with steps.

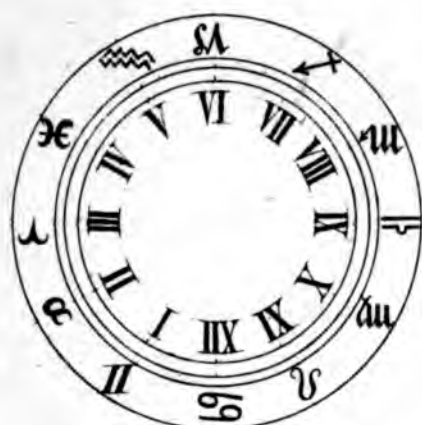
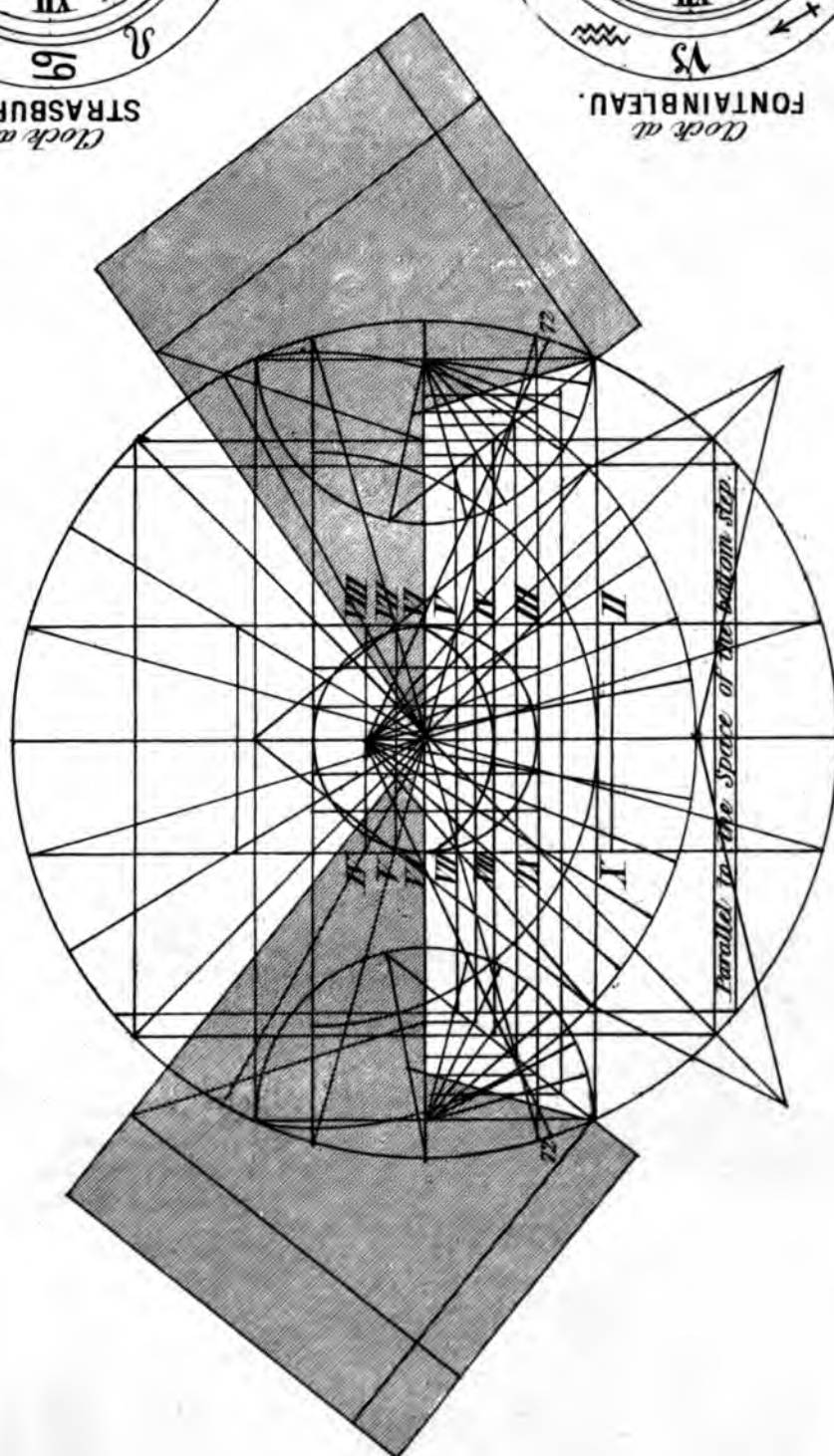
... in the Great
Egyptian Dial with Steps.



*Relation of the side Steps to the radiating hour lines of a Dial
with Steps for Whithy.*



*Relation of the front to the side steps of the Sun Dial for Whitby.
 N. Lat. 54. Arranged for hours of 15° or 60 minutes each.*



*Clock at
 STRASBURGH.*



*Clock at
 FONTAINEBLEAU.*



S. GEORGE FROM A MS. IN THE BODLEIAN LIBRARY.



FROM BRINSOP CHURCH, HEREFORDSHIRE.

**PUBLISHED AS AN ILLUSTRATION IN THE CALENDARS OF THE
 ANGLICAN CHURCH, BY JOHN HENRY PARKER, OXFORD AND
 LONDON, A.D. 1851.**

Western Signs of the Zodiac to the afternoon hours of a Quadrant Dial, and to the Lunar Calendarium of 5 days. This chronicle of Descent of the great Euphrasian Diana from Jupiter, and illustrates the meaning of "a rose principium."

Return here dethroned by the fall between the semicircular dial, and the top step.	1	1 Amphiarus	Argive Chiefs to Enoch's Western Gates of Heaven
	2	2 Parthenopeus	
	3	3 Etoclus	
	4	4 Capaneus	
	5	5 Tydeus	
	6	6 Etoclest	

Theban Chiefs to Enoch's
 Eastern gates of Heaven.

xii., on the seventh step, for return of

+ + Like that of the Roman gladiators — termed MERIDIANI — the hand to hand contest between the two brothers, in the *Seven against Thebes*, viz., that of Eteocles, “the glory of the year,” and senior by birthright, (as in the cases of Cain, Esau, and Manasseh, with Abel, Jacob, and Ephraim, for their younger brothers,) against Polynices, the *oft victorious*, but regarded by his brother as *the contentious*, is given *Eastward and Westward to the Meridian hour*, as that of the Sun’s sixth gate in the astronomy of Enoch.

The others are arranged in two companies of *five*, viz., Westerns against Easterns, in *parallel rows*, as Enoch placed his *other ten astronomical gates of heaven*, in *two parallel rows of five*, for a *Tropical reckoning*, like that of the ancient oriental writing called, by the Greeks, “Ploughing fashion.”

This brings me to a new and possibly conclusive view on the subject. xxiii., xxiv., being the first Lesson appointed for the Morning Service, *Seven Bulls* and *Seven Bulls*, in a light which had never previously occurred to me, viz., that of Enoch's two Lunar Circuits of seven and two of eight days in each of these Equinoctial lunations. The result was that I found the Equinoctial points, on the Egyptian Zodiac of Tentyra, placed between Aries (♈) and Taurus (♉). On naming this to my young mathematical friend, JOHN B. SMILES, of Eak Terrace, he said — Did you ever compare the Roman Calendarium? My reply was, No; but it was stupid of me to have omitted; from the meaning of the old Etruscan word *idware*, to divide; whence the derivation of the word *Ides* in the dividing of lunar and typical time.

When alone, I turned to the subject, and the result has been marvellous to myself. For it proves *clearly* and *fully* why Thursday was numbered the *second* day of the week on one Hindu Zodiac, whilst on the other it is accounted the fifth day, as by ourselves. The same mode of explanation is

equally applicable to the other days of the week as differently numbered on the two Hindu Zodiacs. The law of the variation is this. As Enoch numbered two lunar circuits of *seven* and two of *eight* days to the month of 30 days, so the Romans reckoned two Cycles of Jupiter, or Cycles of 5 days, and two weeks of 9 days (query, for the 18 *Ethiopians of Herodotus*); or two of 7, and two of 8, days, for *half a month* to the semi-equinoctial of 180° degrees on the Circle numbered as days, to half the old Solar year of the Chaldeans.

The details of this Calendarium, when illustrated from the Egyptian Zodiac of Tentyra, will stand thus,—

Ascending Node	Descending Node	Thursday to Jupiter for the Ides	Monday to Juno for the Calends	Mars Tuesday	Mercury Wednesday
4	3	2	2	3	4
Ω	☾	☾	☾	☾	☾
Five days for the relation of the Calends to the Nones, as 5th day in the week of 9 days, compared with that of 7 days; reckoned to Ascending light, Westward going North by the Dragon's head.					
1 Central Sun					
☾	☾	☾	☾	☾	☾
5	6	7	8	9	5
☾	☾	☾	☾	☾	☾
Mercury Wednesday	Mars Tuesday	Moon Monday	Saturn Saturday	Venus Friday	Jupiter Thursday
Five days for the relation of the Calends to the Nones, as the 5th day in the week of 9 days, compared with that of 7 days; reckoned to Descending light, Eastward going South by the Dragon's tail.					

The Nones (or *ninth* day before the Ides, in the dividing of typical time) were reckoned from the *seventh* day of the month, in *March, May, July, and October*, but in all the other months they were reckoned from the 5th. This symbolism compares the Ancient Oriental day of 30 hours with the month of 30 days; for seven typical months compared with the seven typical days of Gen. i.; and with Enoch's lunar circuit of seven days, in his two Equinoctial lunations of 30 days, divided to Ascending and Descending light between the Sun's *third* and *fourth* gates.

Note the typical situation appointed for the *three cities of refuge*, Deut. iv. 41, "On this side the Jordan toward the sunrising;" viz., "Bezer in the wilderness," &c., in its relation to the direction which Balak, King of Moab, brought Balaam, "from Aram, out of the mountains of the east, saying, Come, curse me Jacob, and come, defy Israel."

It also throws a clear light upon a statement made by the author of the *Key to the Chronology of the Hindus*, vol. ii. pp. 376-8, that the *seventh* day of the week was dedicated to JUPITER, saying, "those Indians who make Saturday the *seventh* day, invariably dedicate it to Jupiter." He adds,—"Mythologists frequently mistake this dedication of the planets, annexing a particular day of the week to each; without regarding the day on which the week commenced. Whereas the planet depends on the number of days from the first. For example: the Sittaanders commencing the week from Sunday, that day is sacred to Venus, [query, the Sun? as first in their account;] Friday to Mercury; and Saturday to Jupiter; because they are the *first, sixth, and seventh* days of the week. For the same reason, the Fakeers who commence the week from Friday, dedicate that day, Wednesday, and Thursday, to Venus, Mercury, and Jupiter; as will more clearly appear from the following table:

SITTAANDERS.	FAKEERS.	Order of Planetary Dedications, (but possibly under limitation to the week beginning from Friday.)
1st Sunday	1st Friday	1st Venus.
2nd Monday	2nd Saturday	2nd Saturn. Satyavata.
3rd Tuesday	3rd Sunday	3rd Sun.
4th Wednesday	4th Monday	4th Moon.
5th Thursday	5th Tuesday	5th Mars.
6th Friday	6th Wednesday	6th Mercury. Buddha, an incarnation of Vishnu.
7th Saturday	7th Thursday	7th Jupiter."

According, however, to BLUNDEVIL, The *seventh* day of the week would be dedicated to Jupiter, when the *first* was dedicated to Venus; but the *seventh* was dedicated to Saturn when the first was dedicated to the Sun. The planetary dedications of the remaining days, varied according to the day on which the beginning of their week was dedicated to the beginning of typical time, whether dating the first day from the Winter Tropic, for the beginning of typical time on an East and West Dial, or from the 3rd day of Creation, as given to the Moon, whilst the fourth was given to the Sun when symbolizing descending light to the Moon (for the ancient beginning of typical time as symbolized to the birth of Night, before that of Day,) but ascending light to the Sun's diurnal arc, beginning—like the typical year of Mosaic institution—from the Sun's fourth gate in the astronomy of Enoch.

possibly the Calendarium of the ancient Romans will afford another illustration. For whilst they dedicated the Calends, or first of the month, to no, they dedicate the Ides, or dividing of *monthly* or *lunar* typical time to *Jupiter*. Now the division of the *week* of nine days into two half Cycles of 5 days was as that of their half month divided into two lunar circuits of *seven* days. Hence the *Nones* (which represented the dividing of *weekly* or time) were sometimes numbered as the *fifth*, at others as the *seventh* from the Calends. Thus in a week of nine days, beginning from the Sun and ending with the Moon, reckoning from Sunday to Monday a week of 9 days, *Thursday* as *fifth* day will be in the dividing of time.

But in a half month of 14 days, beginning from Friday dedicated to Venus, Thursday will be both the *seventh* and the first of a week of *seven* days *ending with Wednesday*, or of *nine days ending with Friday*, for the typical relation of the Calends to the Ides.

On comparing the Cycle of 5 with the old week of 9 days, the ancient Orientals divided the Circle of the Equinoctial into 30 equal parts, to represent day and night of 30 hours, compared with the month of 30 days, and divided into two Half Cycles of 15, each typically numbered to six signs of the zodiac. Thus they divided their days, like their lunations, into *three*, as well as four, parts.

The Cycle of 9 they formed out of two Cycles of five, by counting the *fifth* day as fifth of both Cycles. Hence they added 9 to 5 for $2 \times 7 = 14$, to present the *bright fortnight* of the sun's northern path. But Enoch also reckoned the increase of Lunar light by *three Quintuples of days, and its decrease likewise*.

The first of the month they called the *new* and *old* day, as divided into two half days: even as they divided the month into two Half Cycles. This the explanation of Enoch, lxxii. 6—10, though I have hitherto but very imperfectly read the meaning of that passage already quoted.

This beginning and ending of lunar typical time they numbered to the sun's *sixth* gate, or to the *north ecliptic*, given to the West Horizon* on the *hollow* semicircular form of their East and West Dialling. They also symbolized the close of the Diurnal Arc eastward to the south ecliptic for the place of the full moon in the dividing of time equinoctially between day and night. This they thus did in two parallel Cycles of 12 hours, compared with two parallel half months of 15 days. These the Egyptians numbered to HORUS, and the 15 generations of the Cynic Circle so called (from the *star*, at the Heliacal rising of which it commenced).† The Hindus called it a *Parouvan* or half month.‡ Note, in further illustration of this, a Mithraic image of Osiris, with his feet and toes of iron and potter's clay, turned towards the north—e. g., the north ecliptic given to the West Horizon, the place of the Holy of Holies, in the Jewish typical sanctuary.

The imagery thus viewed makes the reference to "the ships of Chittim" in Baalam's typical prophecy, far more intelligible than, as generally interpreted with vagueness, "ships from the West," though in point of historical fact it makes no difference, for the prophecy was fulfilled by Greeks and Romans against Jerusalem in "the latter days" of the Mosaic or typical dispensation.

But the accuracy of the interpretation here contended for is of importance to substantiate the meaning I have elsewhere set upon Rev. ix. 15—that the unlike spirit of the world divided against itself to mutual slaughter (as of old under conflicting impulses of human ambition, traditionally cherished) could continue its desolations, until the new order of things, predicted as the object of Messiah's manifestation in the flesh, should be realized with spiritual and truthful effect for the happiness of man. Hence the Chronology is typical, and figurative, as applied by Virgil to the peaceful reign of Augustus *auguring a new state of things, as by the dawn of a new day*.

"Jam novus, e Cælo, Sæclorum nascitur ordo."

For Gesenius, under the word Chittim, says, "The singular does not occur in the Old Testament, but is found in a bilingual inscription at Athens, here the proper name of a man of Citium, buried at Athens, is written in Greek, "*Noumenios Citieus*," and in Phœnician letters, *Esh-Citti*, as the same with "Ben-Hodeah"—(son of the new moon)—"a man of Citium." The Generic term means *smilers*—warriors.

* Compare Enoch's North Sea and Coast of the North with the Dialling reference to the Great Western Sea, as that of the Pontus Euxinus to the Mediterranean in the expedition of the Argonauts.

† Hence the THOTH was dedicated to ANUBIS, or the Egyptian Fermea, symbolized with a dog's head. HORUS designates the Cycle as originally that of the Equinoctial divided to hours of 15° or 60 minutes to an hour. When limited to the Lunar year of 360, it substituted two hour Cycles of 10 × 15° for two of 12 × 15° = 144°. Their reign of 443 years marks a whole reference to the meaning of HORUS, a Season; for it adds the Quadrant reign of HELIUS, or 83, to the old Solar Cycle of 360.

‡ In Manetho's List of the Cynic Circle 15 names are mentioned. In the Key to the Chronology of the Hindus, the two Parouvans, or half months of 15 days, are not numbered to 30 ending to the days; but to 24, as if for a division of the Equinoctial to an hour Circle of 24 × 15°. Hence we seem to trace from this remote antiquity a mode of converting two typical, Planetary Cycles of 12 hours, into two of 14 or 15, by arranging them in parallel rows, so that the 3rd or 4th hour in the Lunar Cycle of 12 for night should represent the first hour in the Cycle of 12 for day, as in Blundevill's Planetary Calendarium for our week of seven days, beginning from SUNDAY. This explains the contrast in Gen. i., between the calling of light at darkness on the first day of creation; but not appointing the sun, and moon, and stars, typically, for signs and for seasons, for days and for years, until the fourth day. Also, the numbering of the third and fourth days to the nodes in the Cycle beginning from JUPITER.

The HINDU MONTHS of the year numbered to the half-weekly Lunar Calendarium of 5 days to illustrate what they meant by the light and dark fortnights of the month *Magha* for the beginning of their year from the Sun's entrance into Capricorn; whilst, like the Egyptians, dating the Thoth of their Lustrum, (viz., of their five years Cycle, which formed the great SOTHIAIC YEAR of the Egyptians), from the Full Moon in Capricorn; as from the Solstitial dividing of Lunar typical time.

This symbolism gives the Central Sun to the Equinoctial points as going forth from that centre Northwards for Ascending light, and Southwards Descending light under limitation of a Quadrant measure of distance from either Tropic. This they crossed by the semi-circular measure of the Parouvans; one symbolizing the ascension of light to a half month of 15 days, for the bright fortnight of the Sun's Northern path, from the new moon in the Sun's sixth gate to the full Moon in the Sun's first gate; the other called the *dark fortnight of the month Magha*, beginning in 1° ♊, and ending at the place of the Moon's change for the next month in 1° ♋. Thus the Hindu month *Magha* was divided to the Equinoctial—as the Cynic circle of the Egyptians to their Sothiac year—divided into two half Cycles, by their Thoth to the full Moon in ♊, and by their Sothis to the place of the Moon's change in the Sun's sixth gate, in the astronomy of Enoch, crossed by the Moon's Quarterings at the Equinoxes.

This explains the arrangement of the signs on the Hindu Zodiac which glories in its central mountain of gold, as for the hours of an East and West quadrant Dial, when Evening preceded Morning in their astronomical day beginning from xii at noonday.

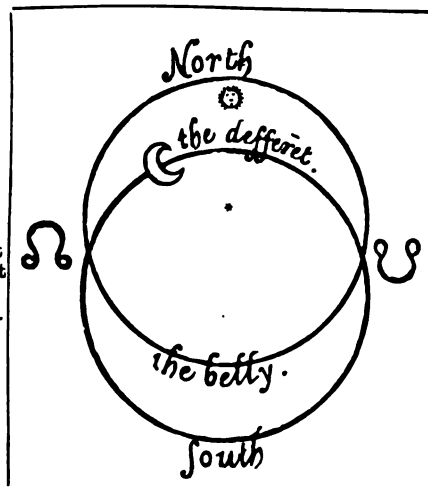
The Equinoctial as divided to the Horizon by the Hindus, to represent a Four-square City of Light round their Central Sun, compared with Blundevil's Dragon symbolism.

This they divided to their old weekly Cycle of 8 days to 8 Lokapalas, or Regents of the Spheres. The four at the cardinal points were Indra, Yama, Varuna, and Soma. The names of the others are Kuvera, Lord of Wealth, and King of the Yakshas; Vivaswat, one, a Prajapati, or mind-born; another, one of 12 Aditya, sons of Kasyapa; another the Sun, as father of Vavaswata Manu. Agni, God of Fire; and Vayu, God of the Wind, and King of the Gandharbas; but I do not know where to place them to the intermediate points of the horizon.

Soma, or the New Moon, ruler of the planets to North Ecliptic, for the Helical rising of the Dog star in Cancer.

Nabhas Sravana & Aug. July
Nabhasya Bhadra & Sept. Aug.
Jsha Aswina & Oct. Sept.
Urja Kartika & Nov. Oct.
Sahas Agrahayana & Dec. Nov.
Sahasya Pausa & Jan. Dec.

Varuna, King of the Waters, Westward, to the NORTH, but Ketuma, regent of the West.
p. 153.



Indra, King of the Gods, Eastward, to the North.

July June = Asharaha Suchi
June May = Tyeshtha Sukra
May April = Vaisackha Madhu
April Mar. = Chaitra Madhu
Mar. Feb. = Phalguna Tapasy
Feb. Jan. = Magha* Tapas

Full Moon in ♍ to South Ecliptic.
Yama, King of the Pitris, or spirits of the departed, Southward. Add also, AGNI, a deity of fire.—p. 83 & 153, n. 1.

The bright fortnight of Magha, for the Sun's Northern path from ♍ to ♌.

Query.—Bright when beginning from the full moon, but Dark when beginning from the new moon? or as bright, Northwards, to Summer, and dark, Southward, to Winter.

Moon's 3rd Quarter.
New Moon to Sun's Sixth gate. II T 8 X = ♍ Full Moon to Sun's First gate.
Central Sun to the Quarter of this typical lunation.
♌ ♍ ♎ ♏ ♐ ♑

The dark fortnight of SRAVANA, for the Sun's Southern path from ♏ to ♍.

The above typical Lunation of Magha, as reckoned solstitially from ♍ to ♌, and inversely for the halves of two lunations (when reckoning two months to a Solar season, and three seasons to a northern or southern declination, as in Wilson's Vishnu Purana, p. 223), is here crossed in like form, equinoctially, by those of the Aswina and Chaitra, or of Cartika and Vaisacha.†

4. Pausa ♏ 5. ♍ Magha
3. Margasirsha ♎ 6. = Phalguna
2. Cartika ♌ 7. X Chaitra

The Bright fortnight or Sun's Northern path from Cartika in ♌ to Vaisacha in T.

The Dark fortnight, or Sun's Southern path from Aswina in ♎ to Chaitra in X, as from the new to the full Moon of the Autumnal Equinox.

1. Aswina ♎ 8. T Vaisacha
12. Bhadra ♏ 9. 8 Tyaishttha
11. Sravana ♌ 10. II Ashleasha

Compare the old double month of the Solstitial Glory and the two Equinoctial Lunations of Enoch with the idea that Scorpio, like Cancer, had occupied an undue share of heaven, until Caesar held the balance of justice in Libra—

Qua locus Erigonen inter Chelasque sequentis
Panditur: ipse tibi jam brachia contrahit ardens
Scorpius, et cœli justa plus parte reliquit.

—Virg., Geor. i. 33.

The very ancient authority for this double series of two half months (Solstitial to Osiris, and Equinoctial to Augustus Caesar; for Autumn as the intermediate season between Summer and Winter) is provable from the Vishnu Purana, as translated from the Sanscrit by Wilson.

Its importance also as a Chronological guide for safely interpreting the typical language of ancient Jewish prophecy is clear when reading the otherwise, yet mystic, language of Zech. xiv. 8—10. For when the typical months (dedicated by the ancient Hindus—Solstitially to Magha, and Equinoctially to the Aswina) intersect each other, for the light and dark fortnight ascribed to each, all is confused as to light and darkness, humanly speaking; as judged of by those ancient Oriental notions of typical and prophetic time, which were to cease for ever in Messiah's day. Rev. x. 6.

For then a new star (or that of Bethlehem) was substituted for the Remphan or FIVE-POINTED Dog Star of the idolaters. Bethlehem means the House of Bread, as that of God's Providence over man in Christ, teaching him to understand that man liveth not by bread alone, though associating the mode in which He wills to be worshipped with the sabbath sign of His own harvest mercies to man in the Paradise of Oriental blessedness. That represented a latitude numbering 7 hours of ascending and 7 of descending light at the summer solstice. It also made that perfect and equinoctial distinction between light and darkness, which is referred to in Rev. xxii. 5 as marking an eternal purpose of God in Christ, for a spiritual distinction between good and evil in its issues, no less eternal and complete than that typically set before men in God's ordinances of day and night, respecting as eternal distinction between light and darkness in nature.

* The Month of Magha was dedicated to Ganesha by the Hindus, as January was to Janus, by the Romans. It formed the Solar Solstitial Season of 2 months typically reckoned as half months. The month of the ASWINS, formed similarly the Solar Equinoctial Season of two months each, divided into half months.

Thus the old Hindu notion of two months to a Solar Season is amply illustrated in the structure of the Calendarium on the Ham-shaped Dial for 5 x 6 = 30 days typically counted for 60 This Cycle they then multiplied by 5 (for each planetary hour was made to represent a Cycle of 5 days) to complete the Antediluvian Lunar year of 300 days, compared with the old Chaldean Solar year, or Manwantara, of 72 x 5 = 360 days of typical and prophetic time.

† Thus both Hindus and Egyptians typically divided the 12 months of the Solar year, into four quadrant measures of the Sun's apparent path through the 12 signs of the zodiac; and numbered each quadrant as a year. Thus the direction of sunrise and sunset would be typically varied four times in the Lustrum, or great Sothiac year of the Egyptians; and with reference to the lunation of 30 days when divided to the Equinoctial, into four quarters, as the priests told Herodotus. The 11,340 years of that reference being the days in 31½ old solar years of 360 days; for the days of the years of their great Lunar Cycle. The sodiacal belt of the MITHRAS d'ARLES is thus divided to four quadrants.

P 208

18th to the Hour of Photon*
instead of 15th for that of M
NOAH'S ARM) going out.

For West Dial at 30
in erect direct form.

THOTH
full Moon in
dividing of time.

*Horizontal of an erect
direct West Dial for N
Lat. 36.*

Horizontal of ave
direct West Dial 1
Lat 36.
of 2x36 = 72: the half of 144.

Gnomon

To be held

Equator at 36

with this vertical line to the Sun

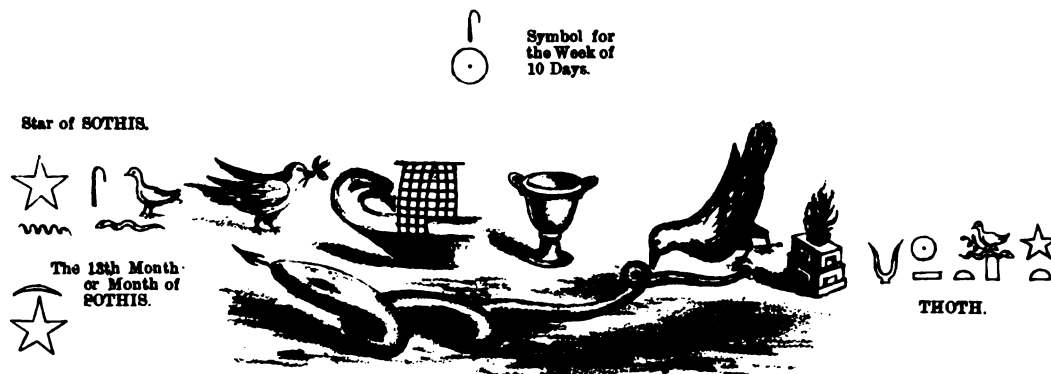
SO THIS
Law Morn

SAT	h	4	♂	☉	♀	☾	☿
SUN	—	—	—	—	—	—	—
MON	—	—	—	—	—	—	—
TUES	—	—	—	—	—	—	—
WED	—	—	—	—	—	—	—
THUR	—	—	—	—	—	—	—
FRI.	—	—	—	—	—	—	—
SAT.	—	—	—	—	—	—	—
SUN	—	—	—	—	—	—	—
MON	—	—	—	—	—	—	—

* See note in further explanation
of this Diagram.

Parallel of the
Earth's Axis.

The 30 divisions of the Equinoctial, compare the day of 30 hours with the month of 30 days, & both with the Zodiacal measure, of $12 \times 30^\circ = 360$.



HIEROGLYPHIC



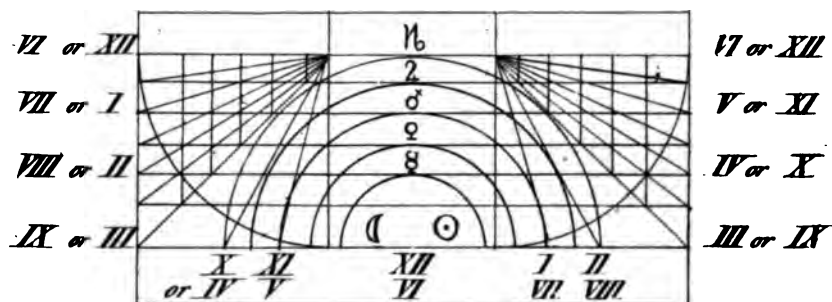
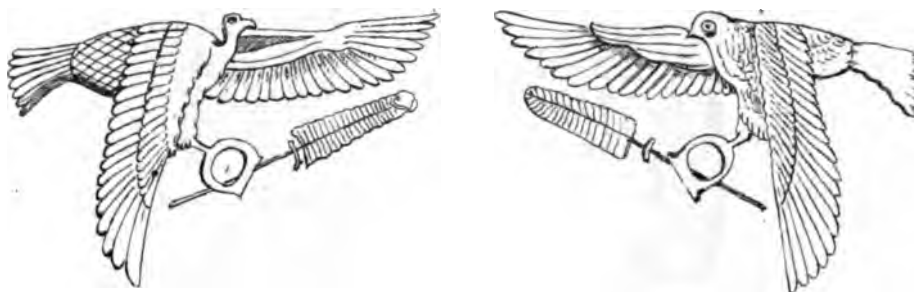
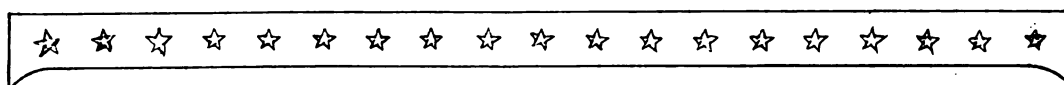
FOR THE

NIGHT OF THE HALF MOON,

OVER THE SYMBOLISM OF THE ANCIENT ORIENTALS
FOR THE TREE OF LIFE IN THE MIDST
OF THE GARDEN OF EDEN.

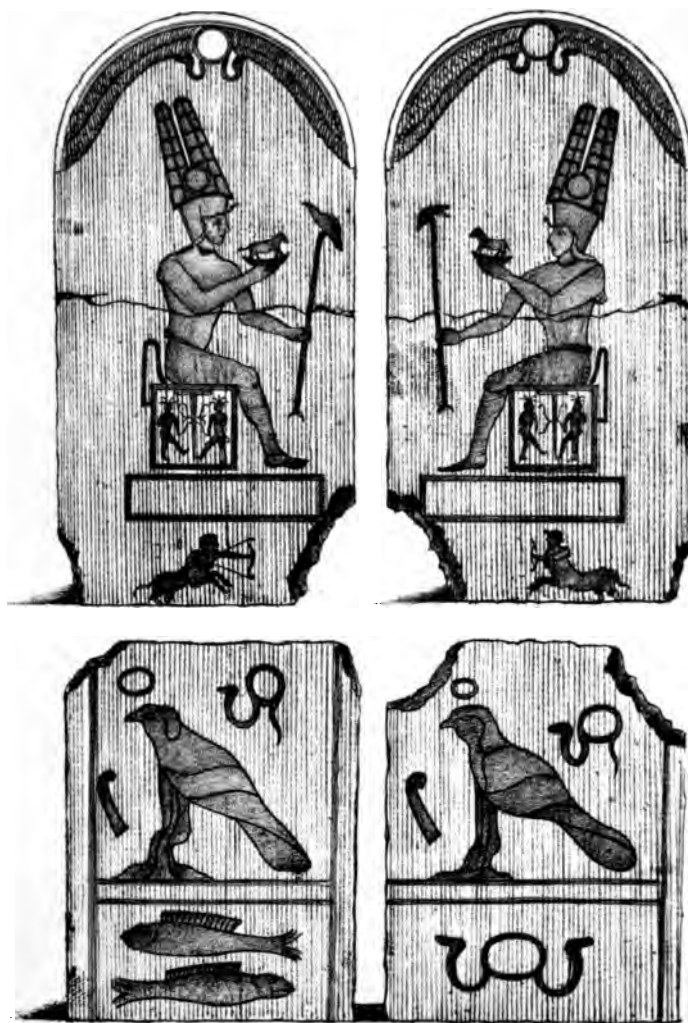


The winged Disc, with another winged Symbolism of like character from the Gallery of Egyptian Antiquities, by Dr S. Birch, of the British Museum. —

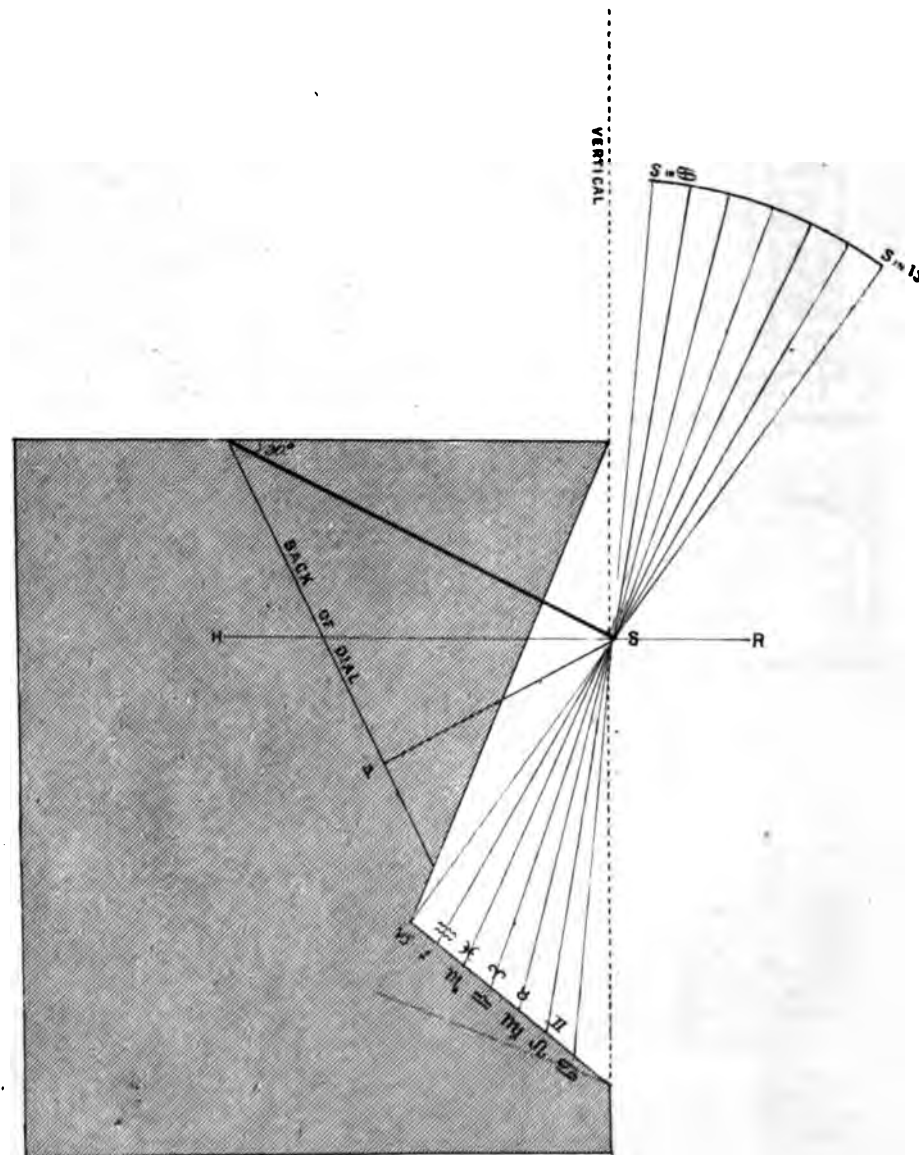


The Steps of the Greek-Egyptian Dial divided to the Planetary Symbolism of Sylvanus Morgan. A.D. 1652, Also to a returning Cycle of 3 hours divided into half-hours on the side Steps, the remaining hours, being numbered to the front steps, as to the meridian of a Polar Dial, or to the hour of VI; for the Evening & Morning of the primeval day, on the East & West Dialling of the Ancient Orientals. Gen. I.

With the steps in this form compare the winged Disc of the Ancient Egyptian Hieroglyphics.



A FRAGMENT OF AN OBELISK AT ROME



Delin. J. B. Smales, B.A. e. Coll. Div. Joaham. A.D. 1869.

The dial appears to be a direct S. dial. If equinoctial angle be estimated as 25° then for Lat. 30° when θ is in \odot it is 5° from vertical.

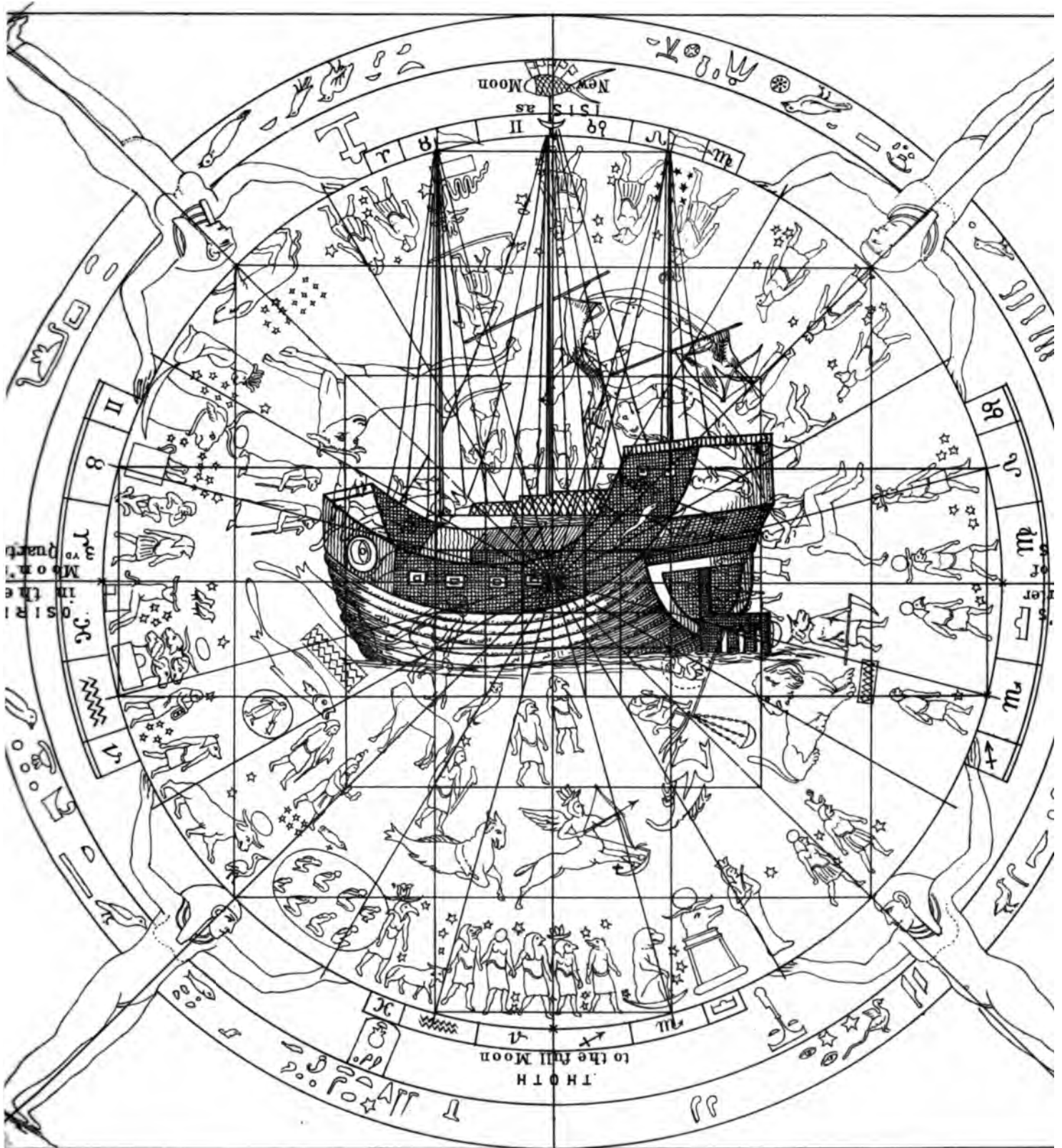
The island of Elbo was 10° on each side, or the difference between 709 & 720 half degrees.

Compare Raber's *Origin of Idolatry*, vol. ii. p. 167, with the four-towered inclosure sacred to *Mars*, which Jason ploughed with fire-breathing bulls, and sowed with dragon's teeth.—*Apollonius Rhodius*, lib. iii. v. 1344-1358. The Circle of the Gates was in the relation to the relation to the east and west dial of the ancient

Symbollising the relation of the Circle to the Square; as "the Island" of the Mysteries, "with a strong door and quadrilateral inclosure."

"As a great sheet knit at the four corners, and let down to the earth."—Acts x. 10-17.

ANALYSIS OF THE PLANISPHERE TAKEN FROM THE TEMPLE OF TENTRA

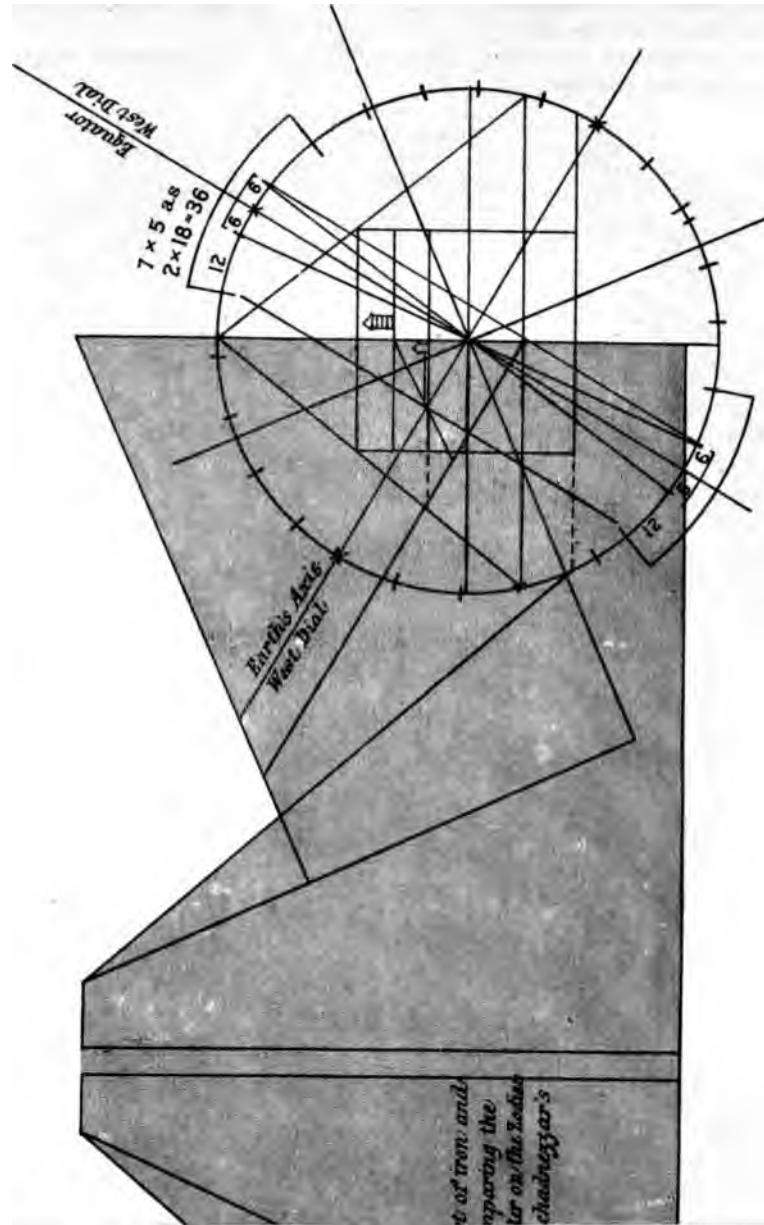


The EYE of PROVIDENCE on the equator of the Egyptian planisphere, divided to the hour lines of an east and west dial, compared with the six typical windows of a Chinese junk, having the Eye of Providence on its prow, and the trident of Neptune for its helm. Hence the "sacred ships" of the ancient Orientals, and the "ships of Tarshish" which Solomon

[illegible]

The equinoctial is here divided as
 $30 \times 12 = 360$ degrees.

id, compared on its east and west sides, with the typical structure of the Greek-
sidered as the hollow semicircle of the Babylonians, inclined
est Dial for the Pyramid plane in N. Lat. 30°.



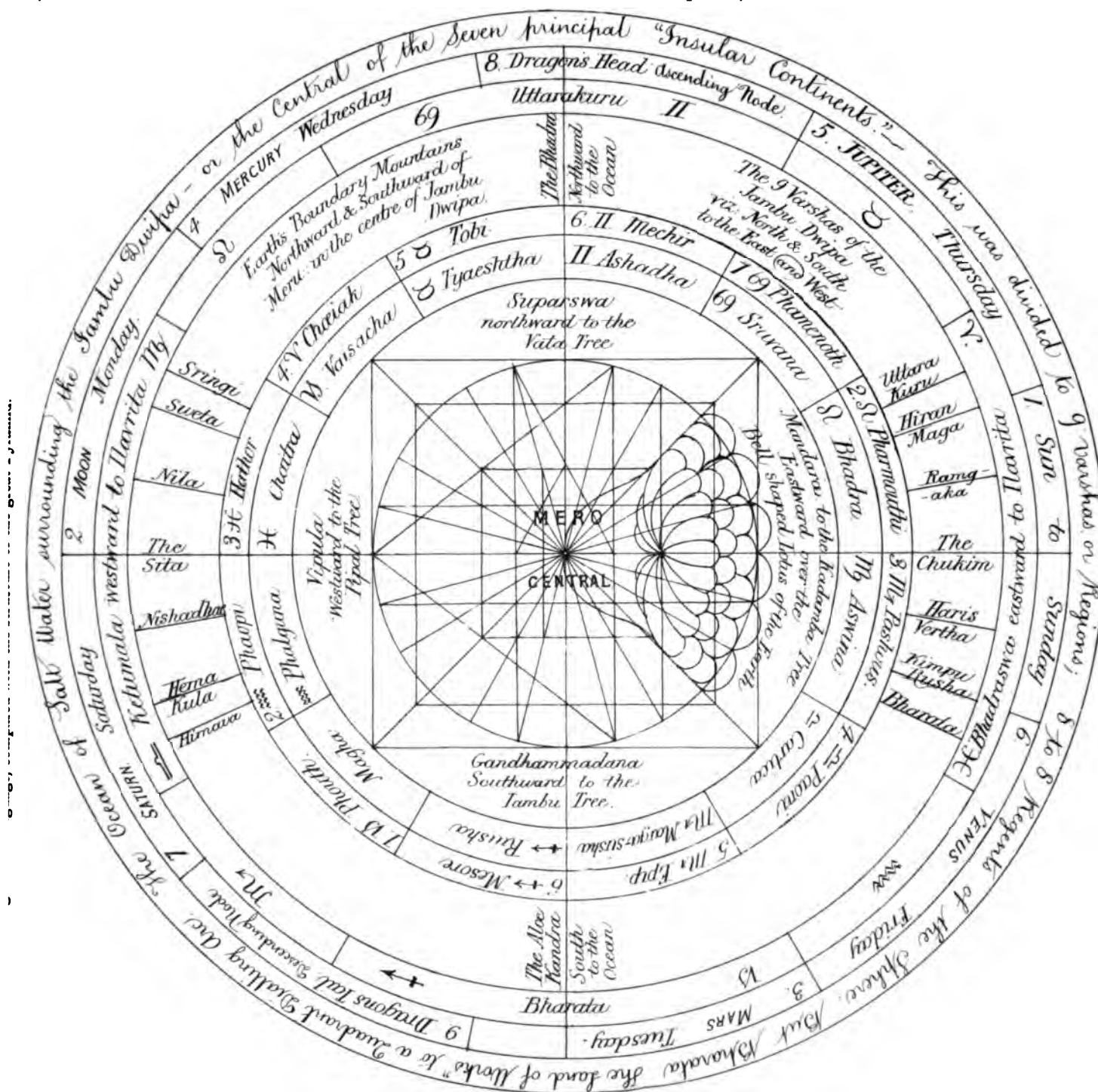
noctial, even as the central river of Paradise flowed
surrounding ocean of salt water from four heads.

the INDUS and its tributaries to the PUNJAB, or region of rivers, to the north-east, on the inverted bell-shaped map ndostan.

t, on the maps of Egypt, the north is given eastward and ward, to the seven-mouthed DELTA of the Nile.

The north-east to MESOPOTAMIA, where Abram and Sarai first settled on migrating from Ur of the Chaldees.

This also was the abiding habitation of NAHOR and his descendants, when Abram, Sarai, and Lot crossed westward over the Euphrates, into the land of the Canaanite.



xi Smyth's measurements for the typical chambers and ies in the Great Pyramid, compared with the Hindu olism for the earth; as a bell-shaped Lotus in its relation to it Meru—considered as an inverted cone—on which was bode of their heavenly gods.

nce, seemingly, the compound symbolism of the Glasgow —received from St Mungo—viz.: 1. The bell; 2. The , for the sun in fishes at the beginning of their year; the tree of life, under a different name to each quadrant of equinoctial, even as the central river of Paradise flowed the surrounding ocean of salt water from four heads.

The Delta of the Ganges with its seven mouths, symbolised to the south-east of Jamba Dwipa—viz., to Bharata Varsha.

But on the map of Egypt, the south-east is typically given to the five-fingered mountain by the 12 bulrushes; adjoining to Abyssinia, the Empire of Sheba, "Queen of the South" in Solomon's day.

The outer leaves of the Lotus are here numbered for a quadrant of 6 hours to the weeks of 6, 7, 8, and 9 days respectively.

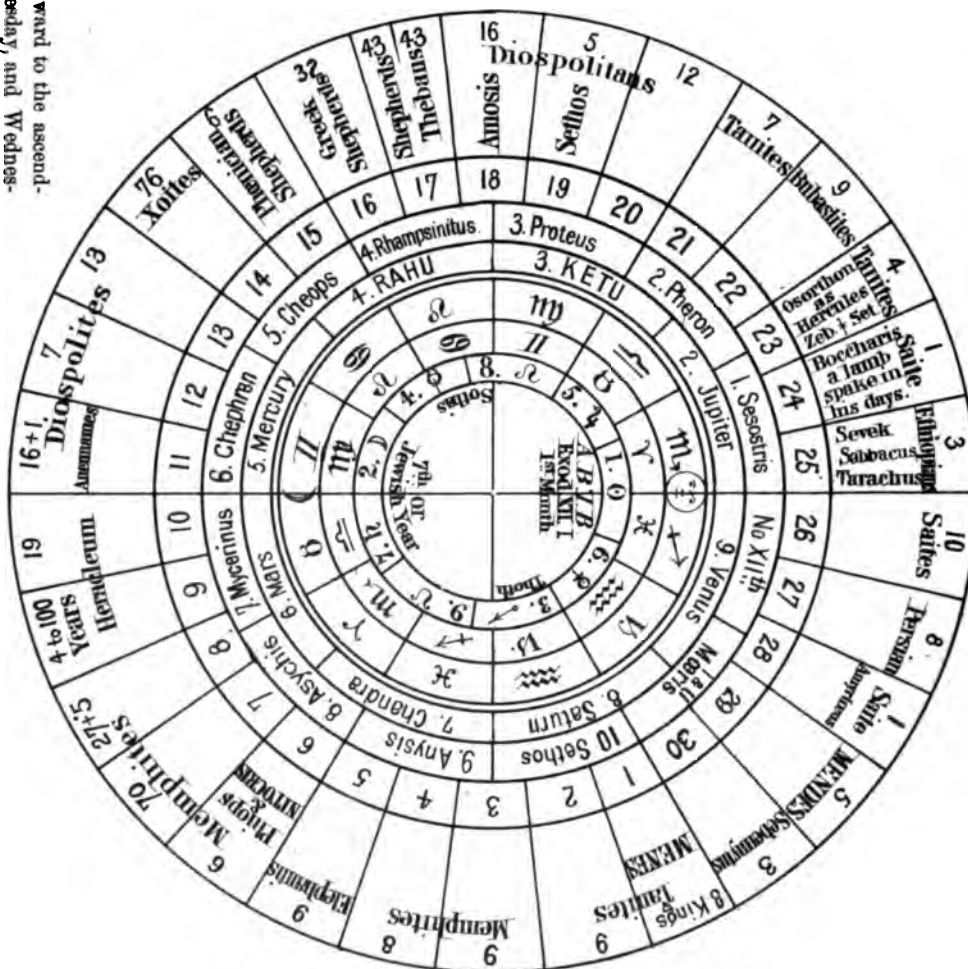


To Horeb by the passage of
the Red Sea at Baal-Zephon.

To the midnight of Israel's
Exodus from MEMPHIS.

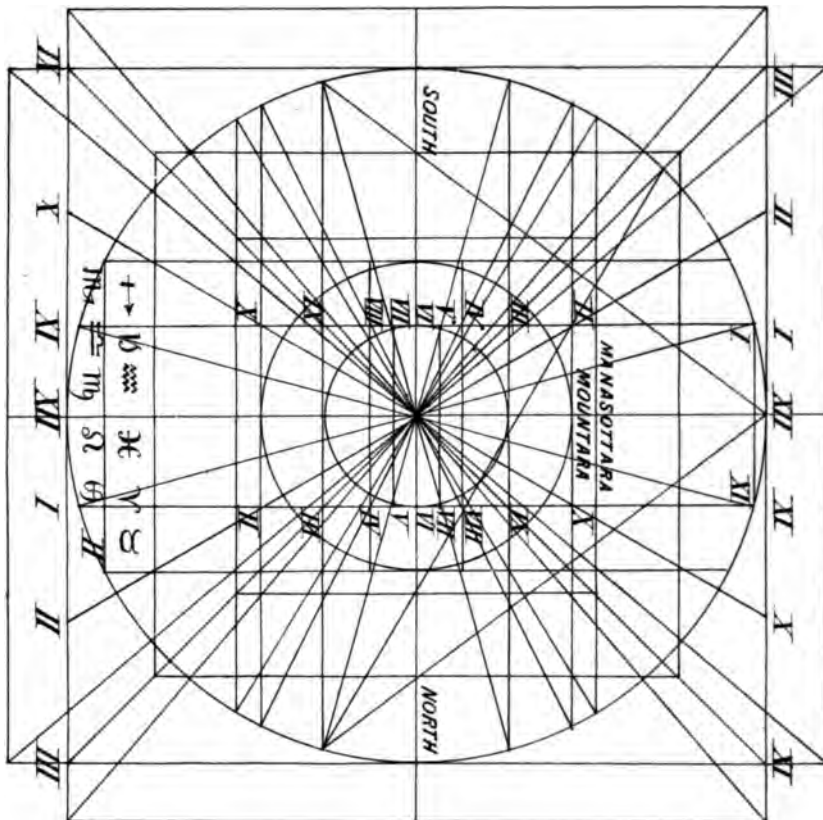
East and West—Southward to the descend-
ing node for Thursday, Friday, and Saturday.

Top of the Symbolism to Sebacus and the
Crocodile kings of Ethiopia.
N.B.—Menes was killed by a crocodile.



Manetho's XXX Dynasties of the Kings of Egypt, in its relation to
their Cycle of XII Kings from Mæris to Sethos; all of whom were also
Priests of Vulcan.

East and West—Northward to the ascend-
ing node for Monday, Tuesday, and Wednes-
day.



The 50 sons of Egyptus
to hours of East Dial.

The 50 daughters of Danaus
to hours of West Dial.

For our national emblem of the Lion and the Unicorn.

The Lion Westward to
Jacob's right hand,
as given to Ephraim.



The Unicorn Eastward
to Joseph's left hand,
as given to Manasseh. Hence, seemingly,
the division of that tribe eastward
and westward.

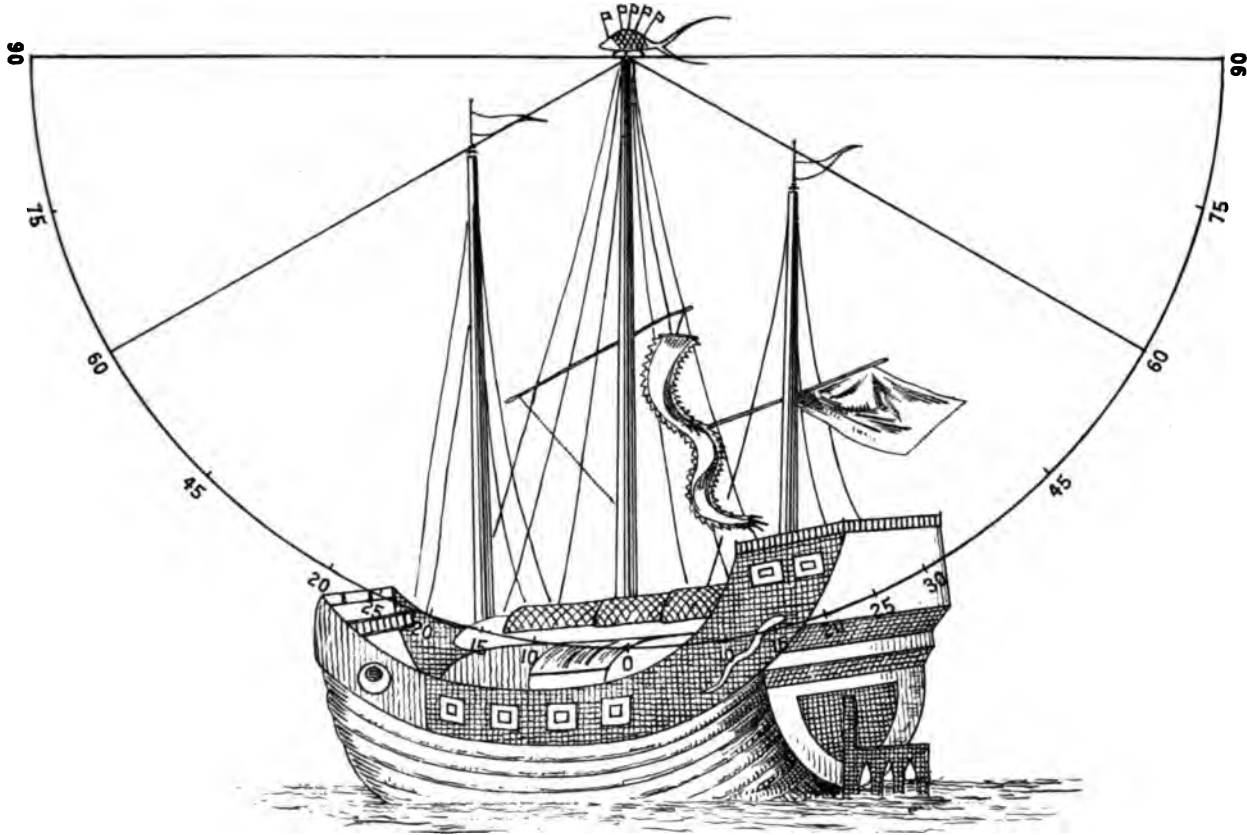
Twice 50 and twice 40 to twice 90°, for the diameter of the circle given to Hydra, dividing between the Dove and Raven symbolism, for ascending and descending light in the Noah's Ark lunar year of 300 days.

For the relation between Brahma's life of 100 years, and the diurnal arc of an east and west dial, substituting twice 50 for twice 45.

An attempt to verify Professor Piazza Smyth's pyramid measurements from the symbolic geometry of the Vishnu Purana, and that of the promises made to Abraham and his seed, compared with the east and west typical dialling of the ancient orientals, as referred to in Zech. xiv. 4-10.

A CHINESE JUNK,

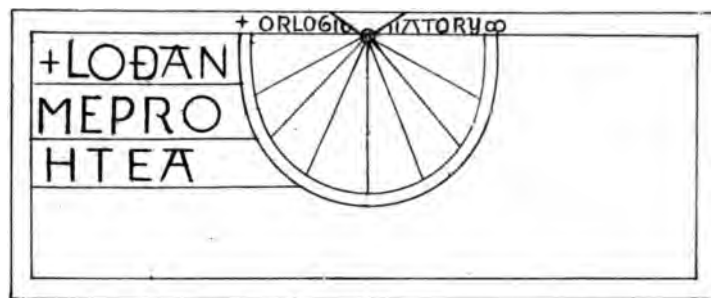
With the Eye of Providence on its prow, as of dialling relation to the typical structure of the ships of
TARSHISH which SOLOMON sent to OPHIR for GOLD, thereby BAALISTICALLY
corrupting the NOAH'S ARK dialling symbol of Jewish typical prophecy.



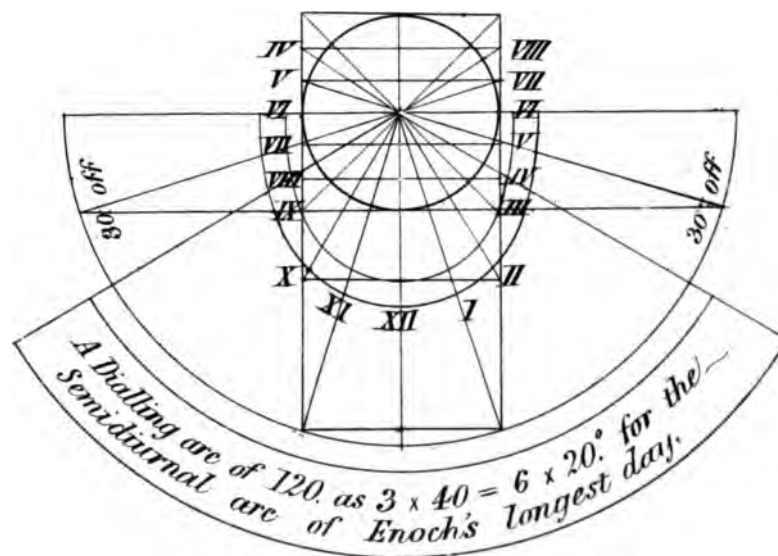
The length of 300 compared 12×25 as 10×30 with 12×30 as 10×36 for lunar months of 3 times
10 and 4 times 9 days, harmonised as yearly cycles of 10, compared with yearly cycles of 12 months for
100 years of 360 days equal 120 of 300 days, as the reference of Gen. vi. 3. This window, Enoch
says, "at a certain season grows extremely hot."

The Old Saxon Dial at Edstone.

*The hours number 80 minutes, or 1 hour, 20 minutes of Equinoctial time;
being hours of Enoch, or 20° to an hour.*



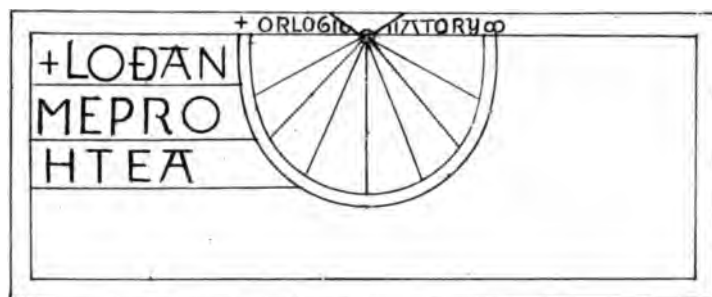
Dialling lines explanatory of the Edstone Dial.



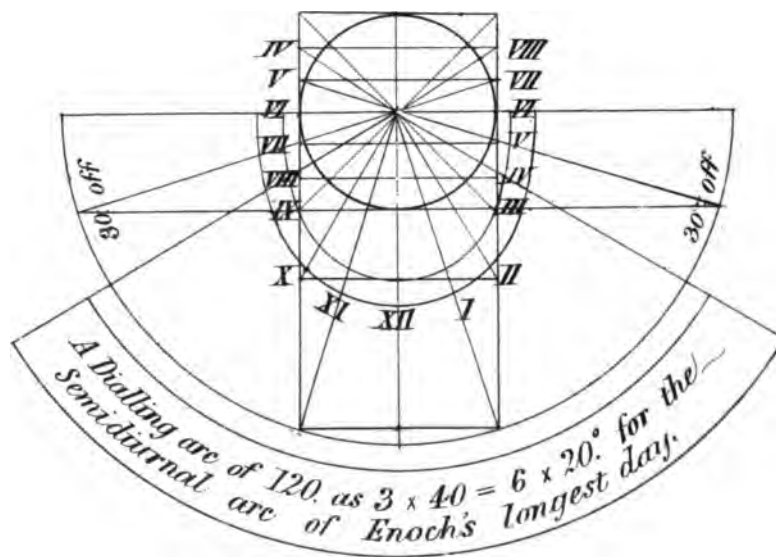
*Nº 1. From the ordinary structure of an East & West Dial
for hours of 60 minutes. —*

The Old Saxon Dial at Edstone.

*The hours number 80 minutes, or 1 hour, 20 minutes of Equinoctial time,
being hours of Enoch, or 20° to an hour.*

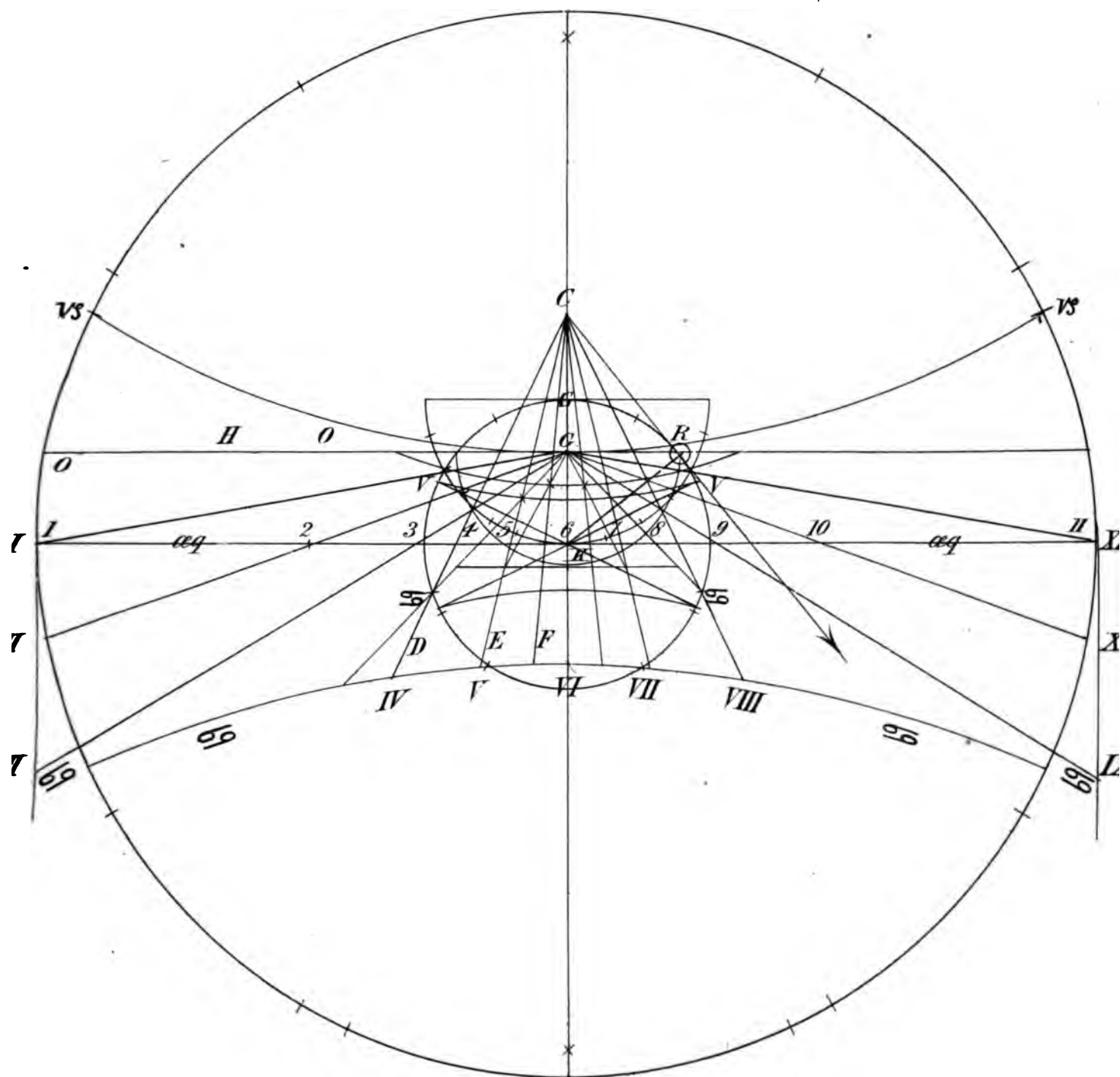


Dialling lines explanatory of the Edstone Dial.

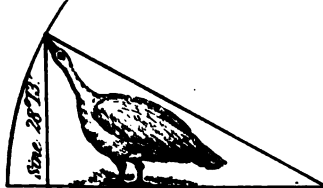


*Nº 1. From the ordinary structure of an East & West Dial
for hours of 60 minutes. —*

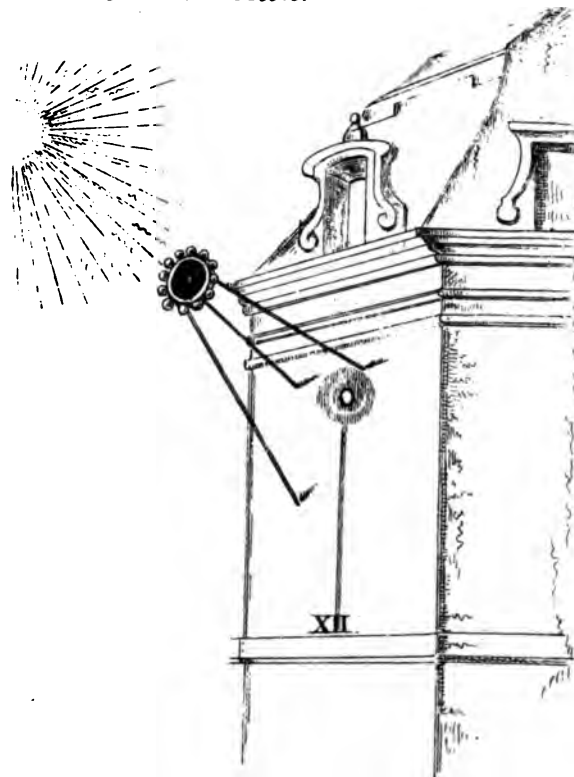
Ferguson's construction of a Babylonian Dial for London, worked out, to show the relation of the Tropics to the Equator of the Dial plane.



SFB'S Beak.
For a Gnomon when Dialling
by a point of Shadow.



The 3 Cyclopes.
For a Gnomon when Dialling
by a point of Light, from
Bedos de Celles.



Inclined Dial Planes from Bedos de Celles.

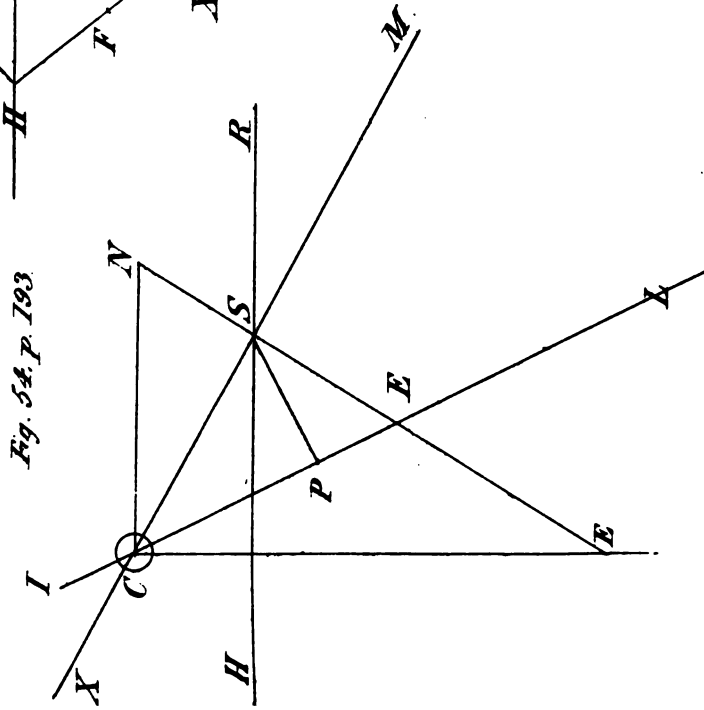
Plate XVIII.

Fig. 54. p. 193.

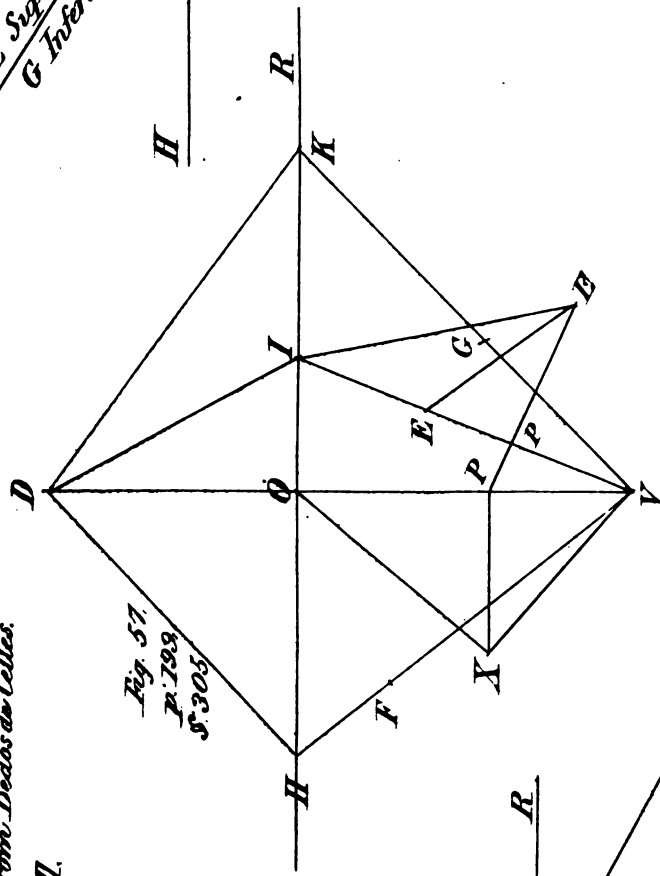


Fig. 57.
p. 198.
S. 305.

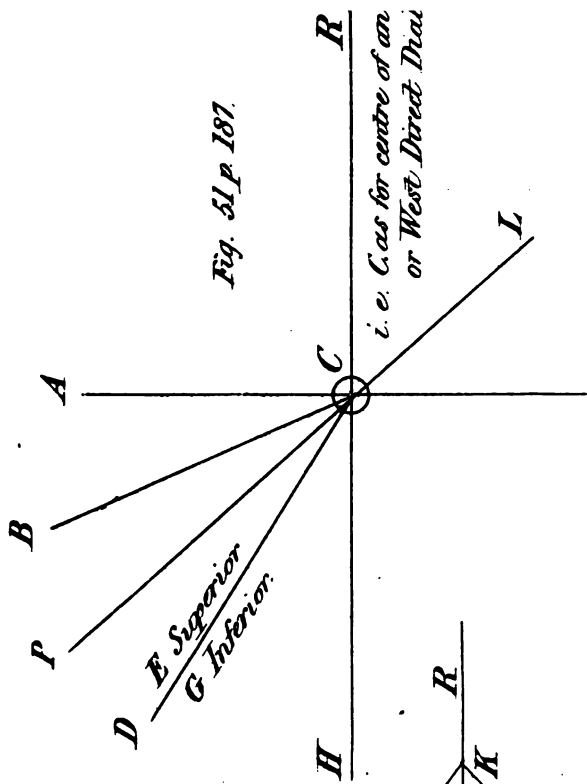


Fig. 51 p. 187.

i. e. Gas for centre of an
or West Direct Drive

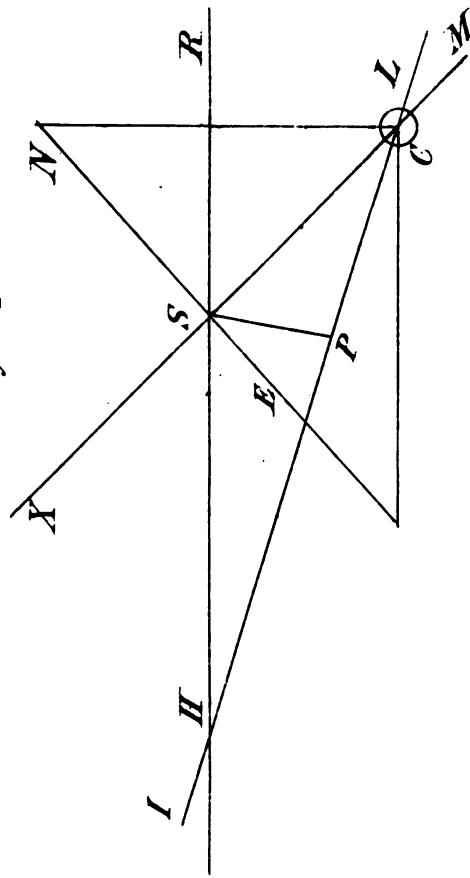


Fig. 55p193.

*Inclined Dial Planes from Bedos de Celles.
Plate XVIII.*

*Fig. 57.
p. 193
§. 305*

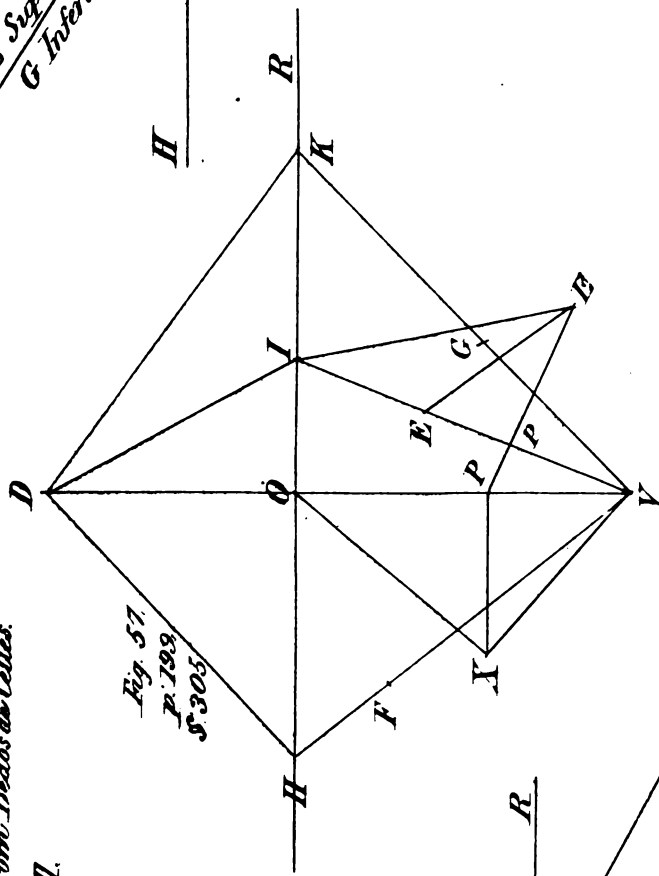


Fig. 54, p. 193

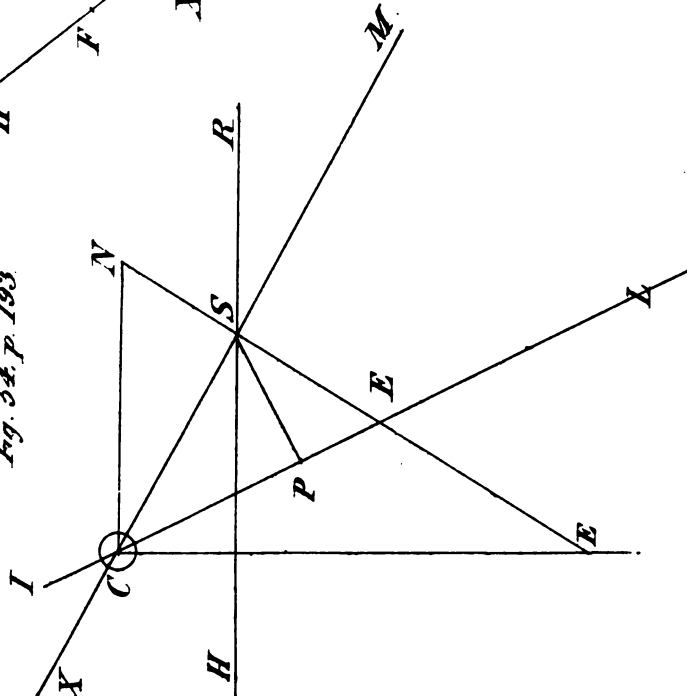


Fig. 55, p. 193

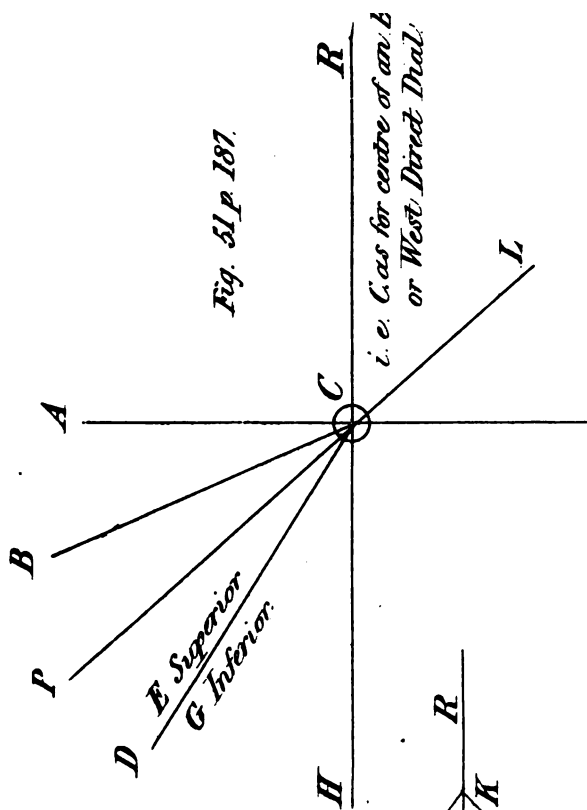
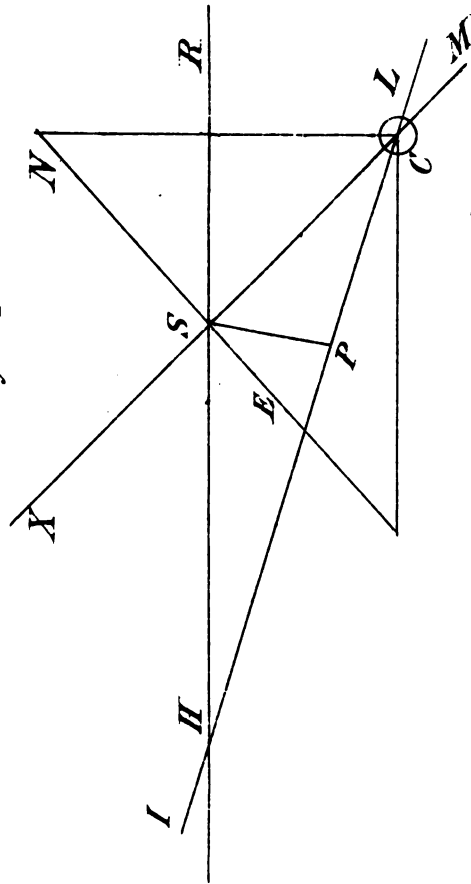
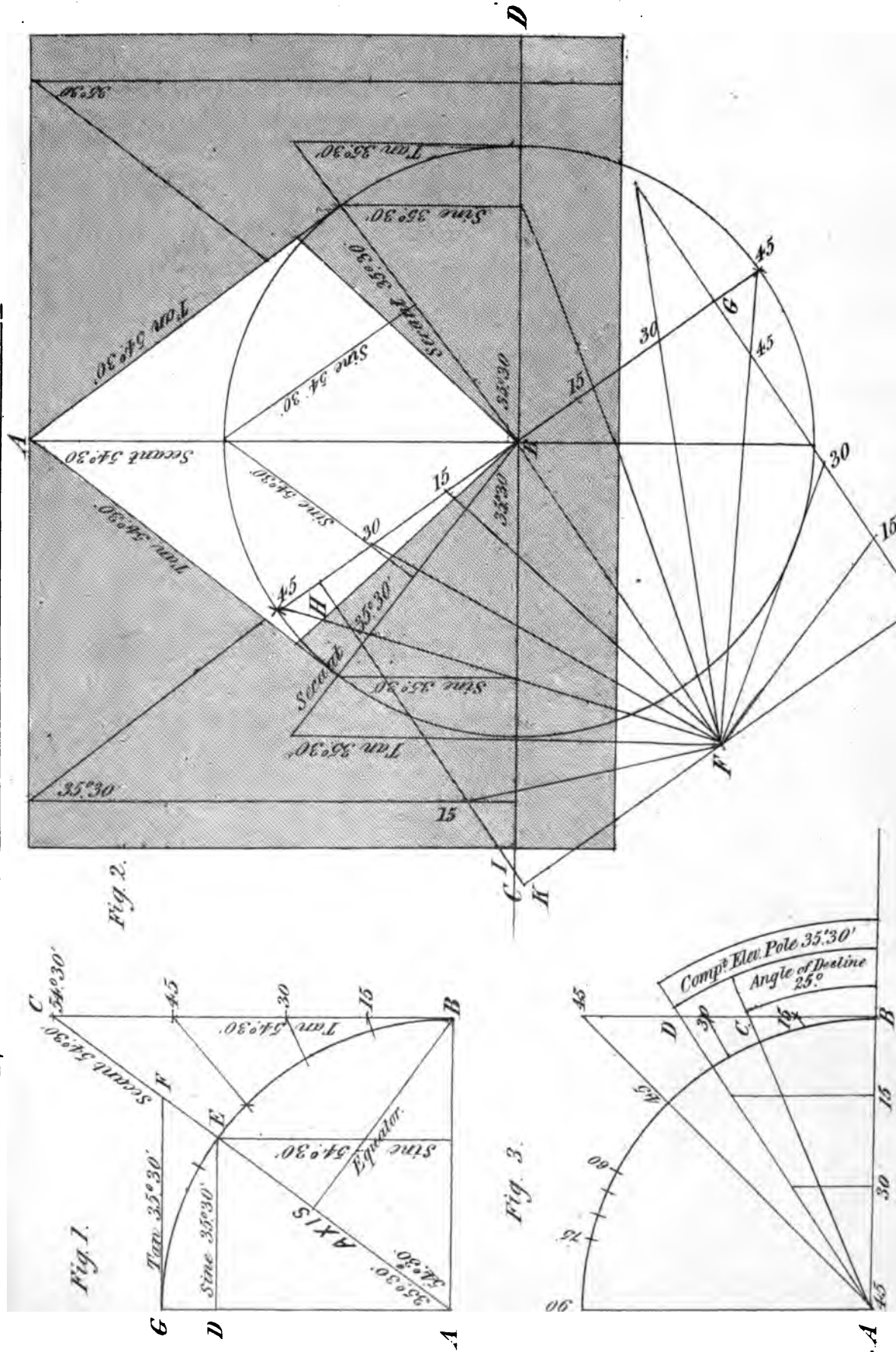


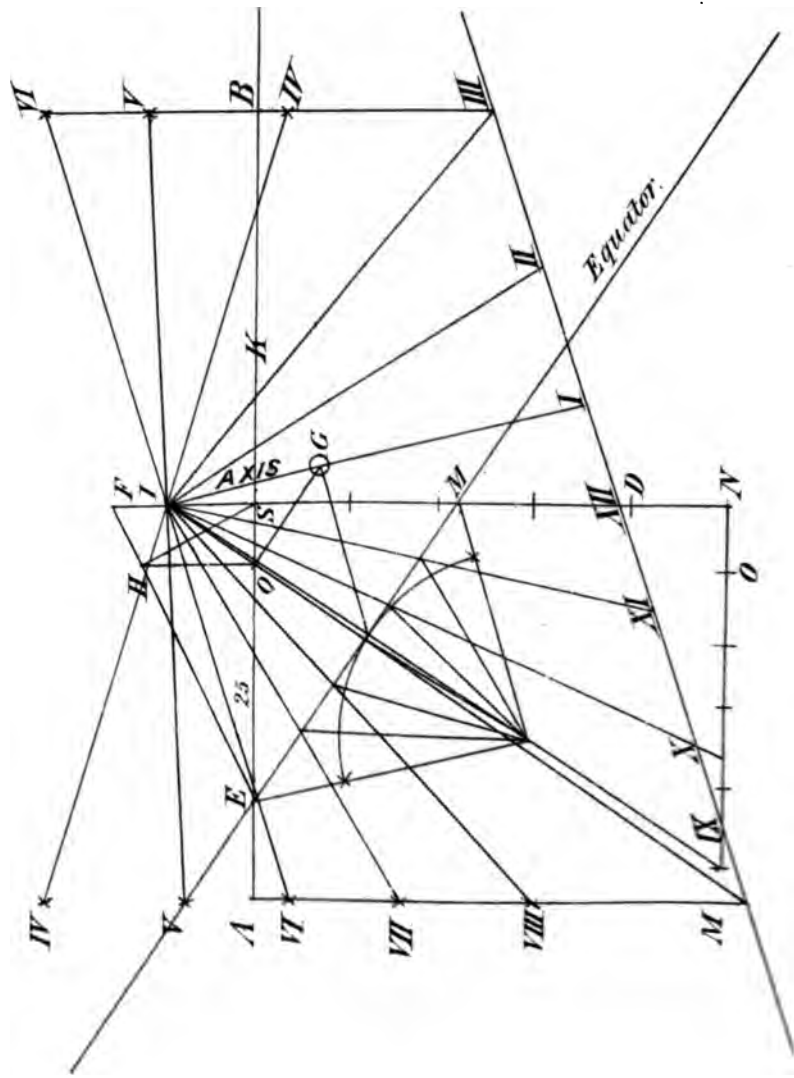
Fig. 51, p. 187

*i. e. C as for centre of an L
or West Direct Dial.*

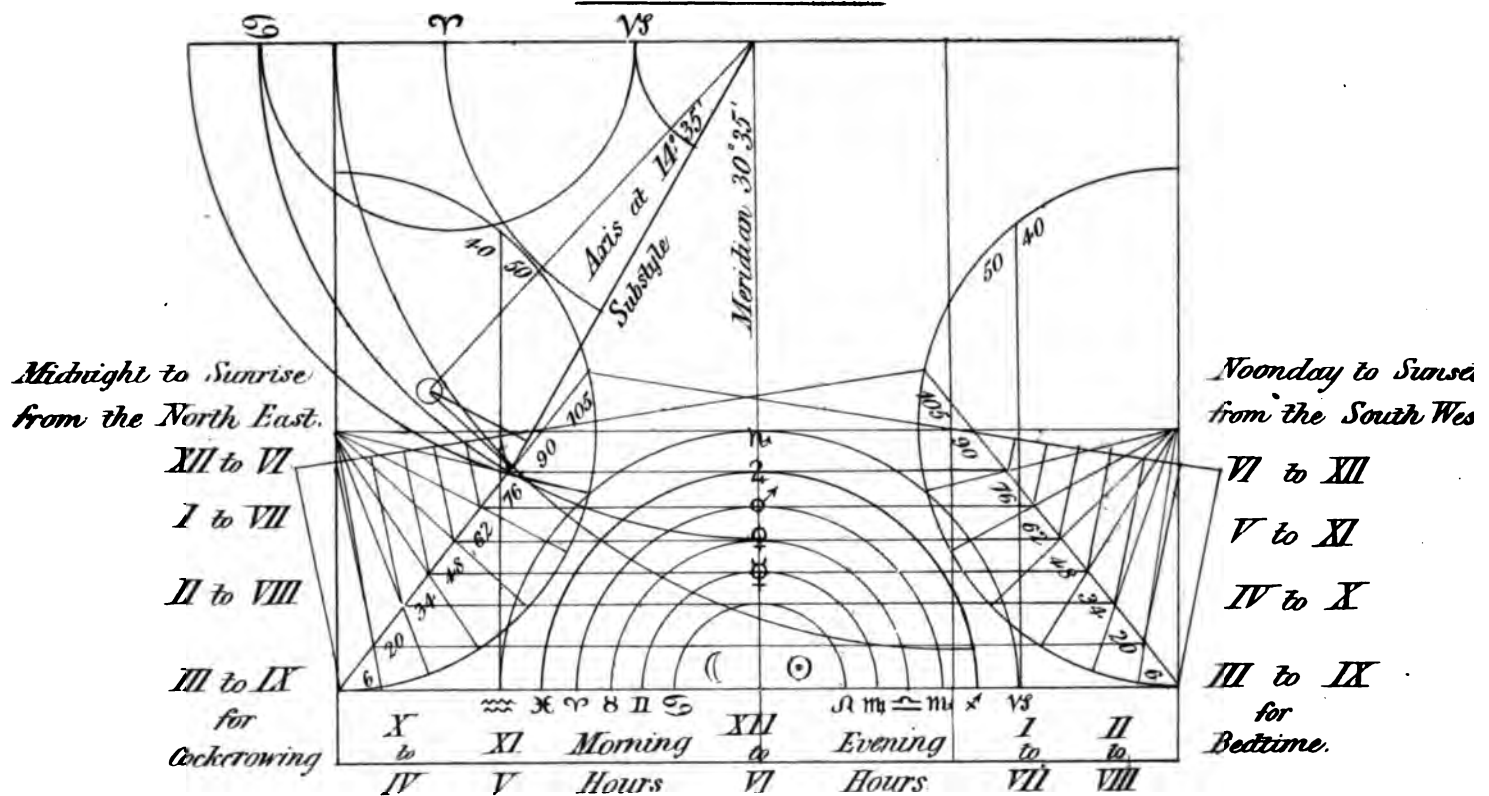
Fig. 1. The Fundamental Dialling Diagram of Sydenus Morgan.~ Fig. 2. His mode of making an erect Vertical Declining Dial.~ I have here substituted a Declination of 35° 30' for his of 45° and the Latitude of Whitchy for that of London: nor have I given other hour lines than those the points of which are found on the Horizontal line! Fig. 3.~ This Diagram for determining the relation between the Angle of Declination and that of the Co-Latitude.



To keep the hour lines of a Declining Dial within a right angled parallelogram.~
 This Diagram is as that of Sybarus Morgan, merely substituting the Latitude of Whittby
 and a Declination of 25° , for his of 30° . His mode of finding the hour-lines is mon-
 over verified by applying that of Bedas de Celles, for the span of the Equinoctical
 between the hours of II & XII.



*New Diagram
For the relation of the steps to the curves.*



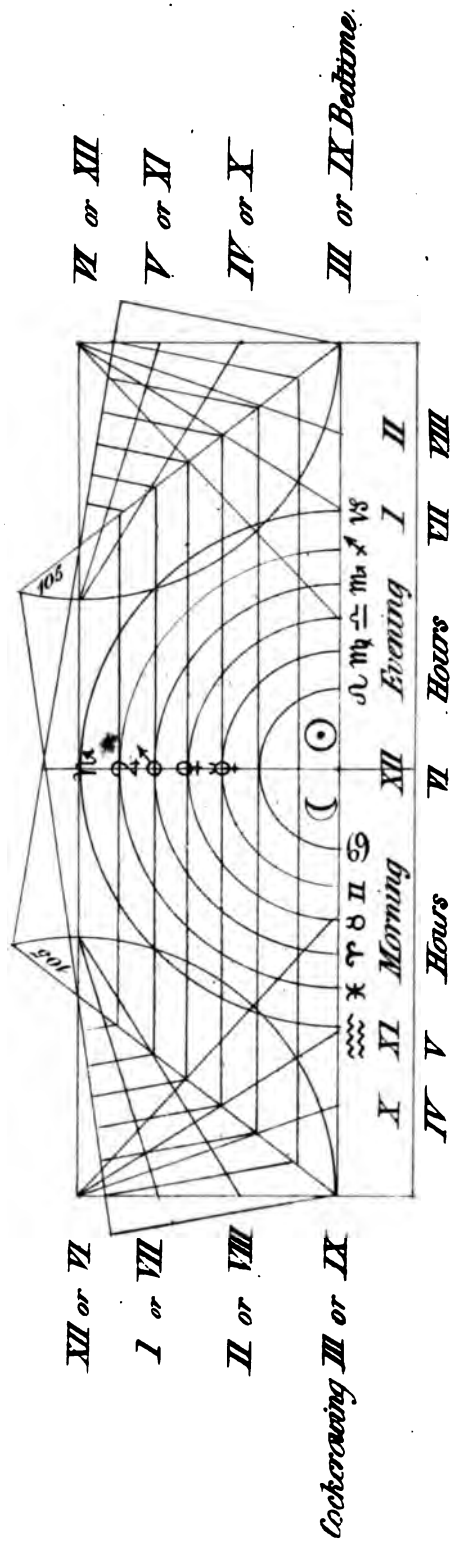
Noonday to the "Dividing of time" typically between East and West.

For the evening before morning of Gen. I. & Zech. XIV.

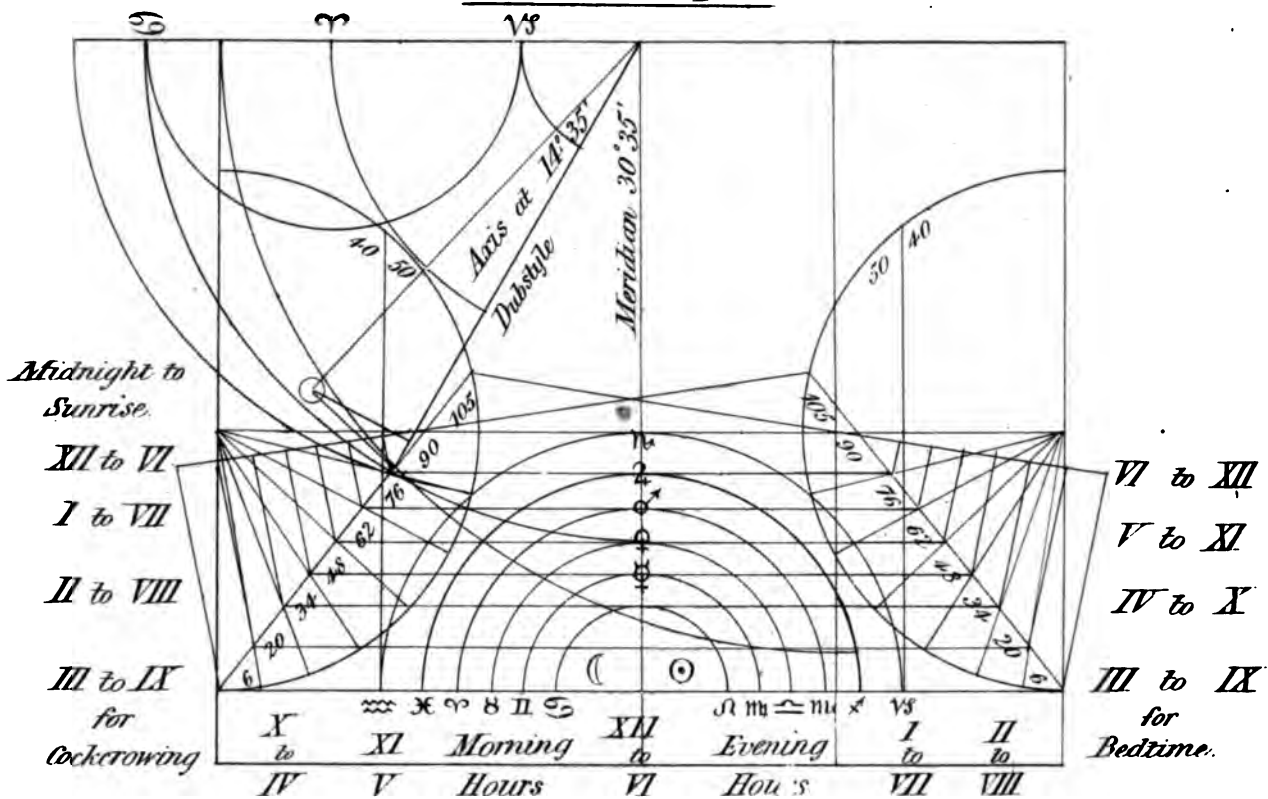
Illustrating Isaiah XXX. 26.

From the "Nychthemeron" of the Ancient Orientals. For that began their equinoctial night and day of 24 hours from Sunset to the Autumnal Equinox; whilst we begin our day and night of 24 hours from Sunrise to the Vernal Equinox. But, in Dialling, the Eastern Signs are numbered to the morning hours westward on the Horizon, from Sunrise to Noonday, and the Western Signs to the afternoon hours eastward on the Horizon, from Noonday to Evening. This will also explain Herod II. v 142, that (within their typical Quadrant Dialling for the Cycle of their new moon, as, I understand the interpretation by M^r E. Sang of Edinburgh). "The Sun had four times deviated from his ordinary course, having twice risen where he uniformly goes down, and twice gone down where he uniformly rises."

*The steps of the Greek Egyptian Dial, shewing how the
Hour lines should be put to steps.*



*New Diagram
For the relation of the steps to the curves.*

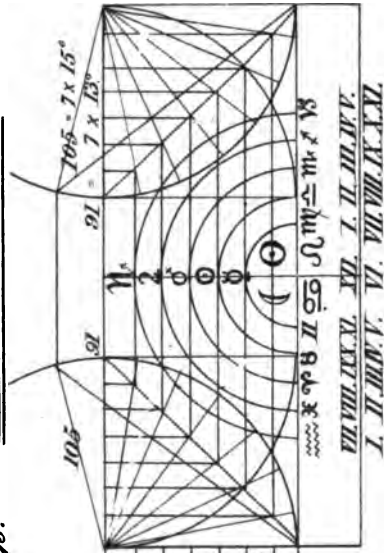


*Noonday to Sunset.
For the evening before morning of Gen. I & Zech. XIV.
and illustrating Isaiah XXX. 26.*

Thus the Enoch's before morning for the beginning of typical time in the moon's ascending Node seems to have given the six closing hours of a West Dial. ~ from sunset to midnight typically to to suns dialling light between midday to sunrise.

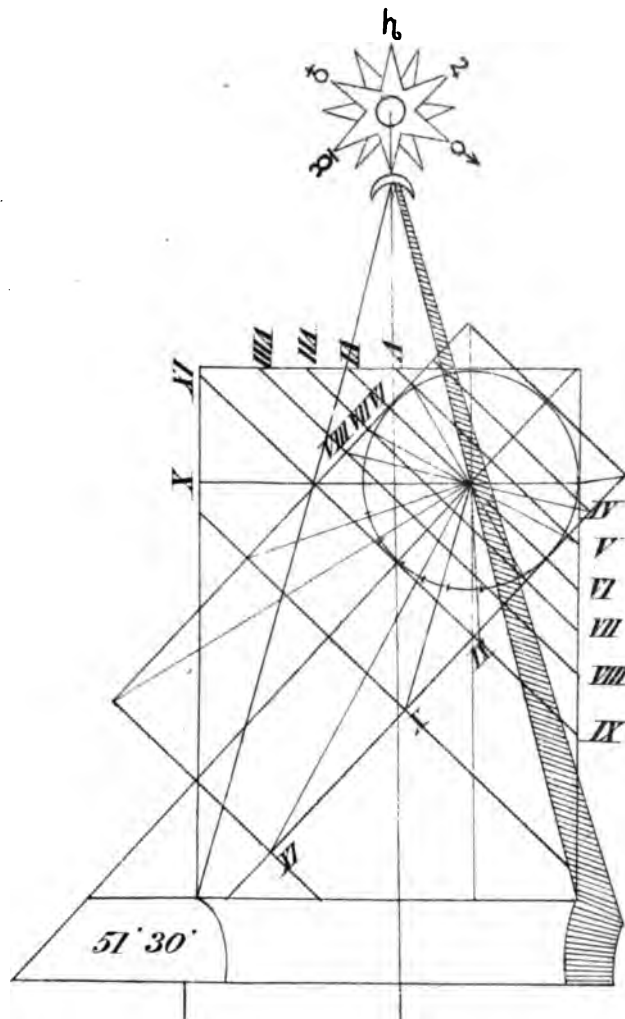
The Steps divided for a Semidurnal Arc: of 7 hours (as $7 \times 15 = 105$) for the longest day in N. Lat. 30. reduced to one of 6 hours, for a Quadrant-Measure of the Sun's varying altitude throughout the year, compared with Enoch's Quadrant of $21 = 7 \times 13$; for a weekly lunar circuit of seven days.

	Sat.	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.
W	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	5	6	7	1	2
3	—	—	—	—	—	3	4	5	6	7
4	—	—	—	—	—	1	2	3	4	5
5	—	—	—	—	—	6	7	1	2	3
6	—	—	—	—	—	2	3	4	5	6
7	—	—	—	—	—	7	1	2	3	4
8	—	—	—	—	—	4	5	6	7	1
9	—	—	—	—	—	1	2	3	4	5
10	—	—	—	—	—	6	7	1	2	3
11	—	—	—	—	—	3	4	5	6	7
12	—	—	—	—	—	7	1	2	3	4



The Ancient Oriental mode of numbering hours, and days, and months, and years, by a common Cycle of seven; under the mystery of the seven sealed Book, which none but the Son of the Tribe of Judah could open. Rev. T. S. D. 15.

N.B. This seems to me to explain the object of the fall between the Curved part and the Steps, as one with that for which the side Steps have an inclination of 15° above the angle of Latitude.



The Astronomical Pillar in the Court of Arts, by Sylvanus Morgan in its relation to the hour lines of an East Dial with the style's height over the hour of VI limited between the intersection of the Angular Incline and central line of sloping side by Earth's Axis. There is a similar column without the Dial, fronting the Museum at Arles. Though the hours are numbered as above for an East Dial, by Sylvanus Morgan, this side of the Pyramid will only give the afternoon hours of a West Dial in the Sun, as tried by myself in the Sun. For I know not how to present such a dial southward to the Sun, & therefore cannot conceive this to be the meaning of his words; "on the South side (viz. of this pyramidal pillar consecrated to art),— stood ASTRONOMIA, respecting the Sun, & on the North side GEOGRAPHIA, respecting the Pole; seeing that reference to the Pole is as necessary for Dialling as for Geography.—

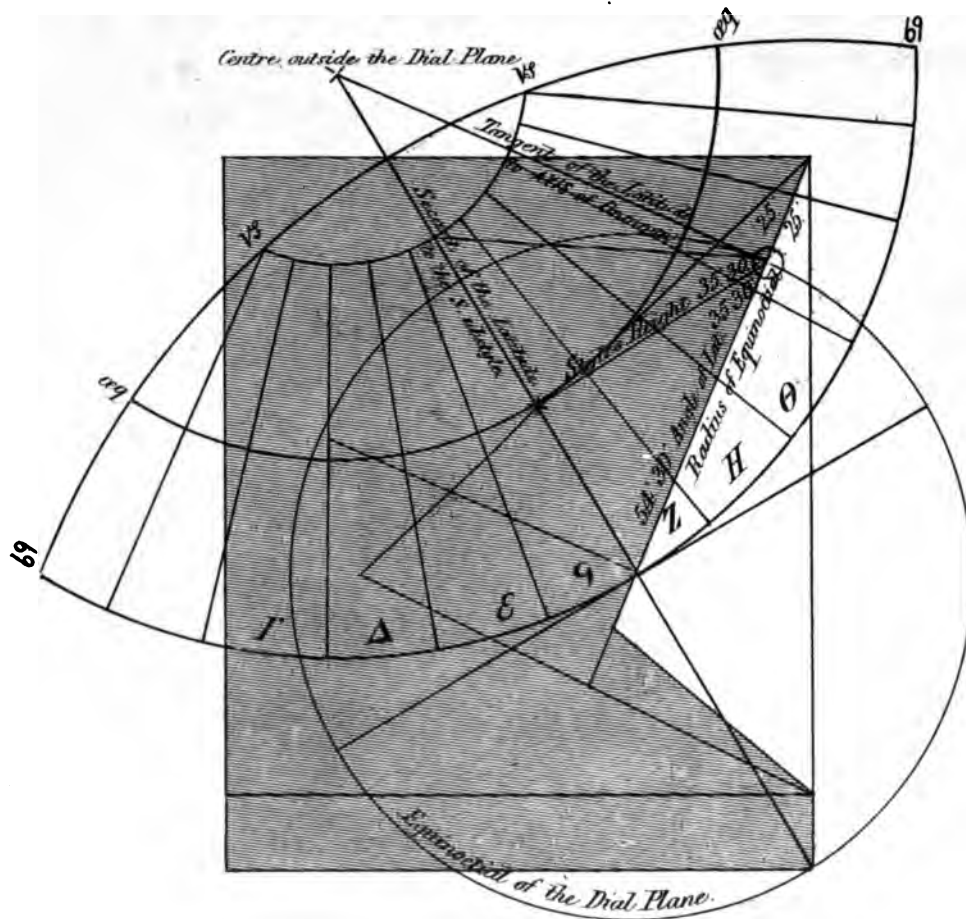
Our earthly Sphere:—
the Seat of 'Clementia' the 'Wisdom' of Prov. VIII v.1 & 22.
representing Wisdom, Mercy & Power, harmonized
In the Works of GOD:—
HENCE,

The Anatomical Figure of Sylvanus Morgan— for the Sun's yearly course in the ecliptic symbolised to a female figure sitting on the World, with the head to Aries— the centre of figure to Leo & Virgo, or to Virgo between Leo & Libra, with Pisces under her feet, for the intercalary months between the old Lunar year of 10 months, as that of the flood season compared with the solar year of 12 months—

The signs of the Zodiac are here arranged for an East & West, or Quadrant Dial, as on the Zodiocal belt of the MITHRAS D'ARLES. This Symbolism shews the relation of VISHNUS fish Avatar to the old Myth of the MERMAID.

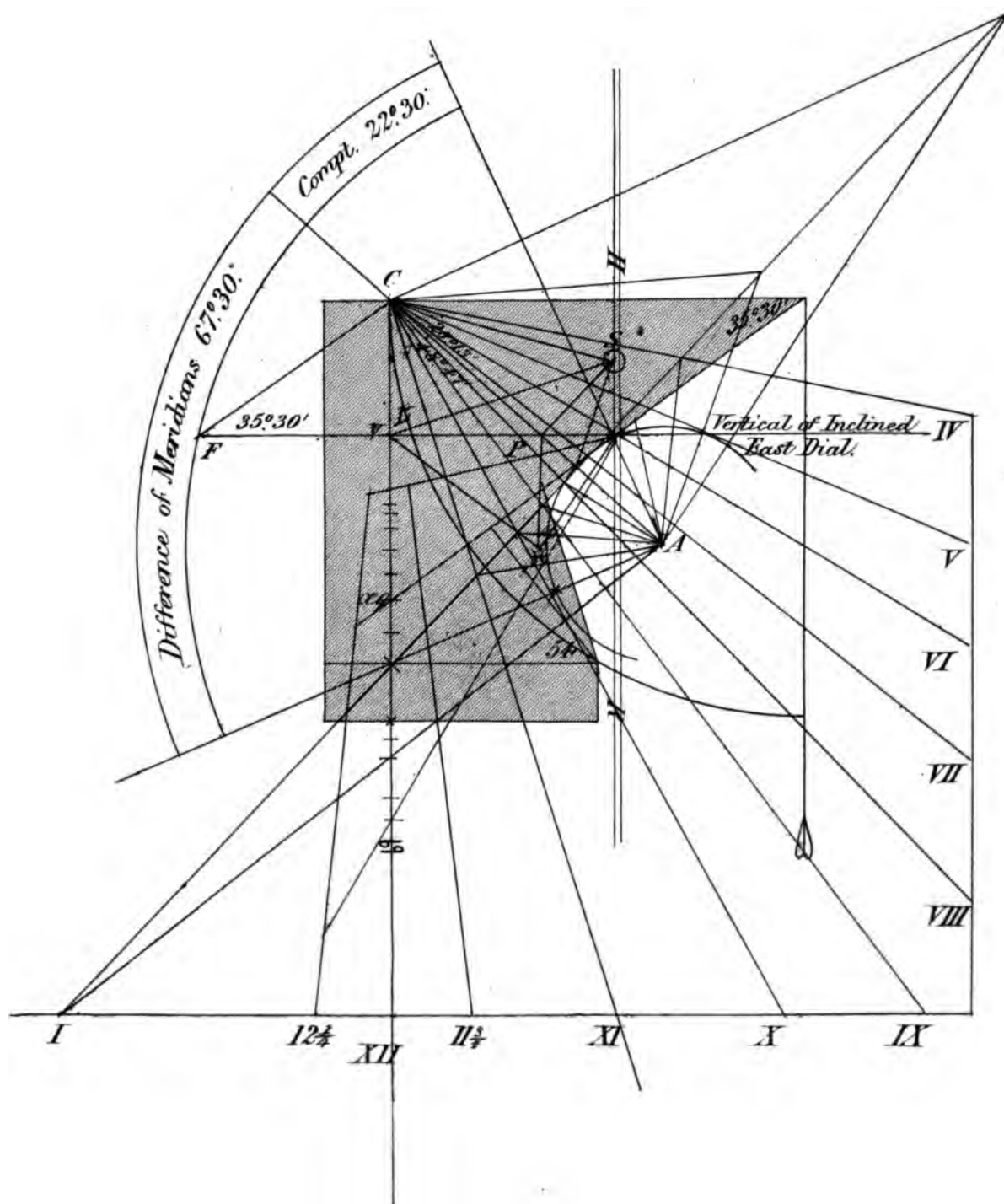


Some of the Welsh legends respecting their old Queen Helen, & the boulders deposited by her, or by some giant of those days— in the rivers & on the hills, evidently have reference to the old heathen superstition respecting the image of Diana which fell down, from Jupiter. Acts. XIV. 35. To set heathen Philosophers thinking even as we are indebted to the fall of an apple for the philosophy of SIR ISAAC NEWTON.—

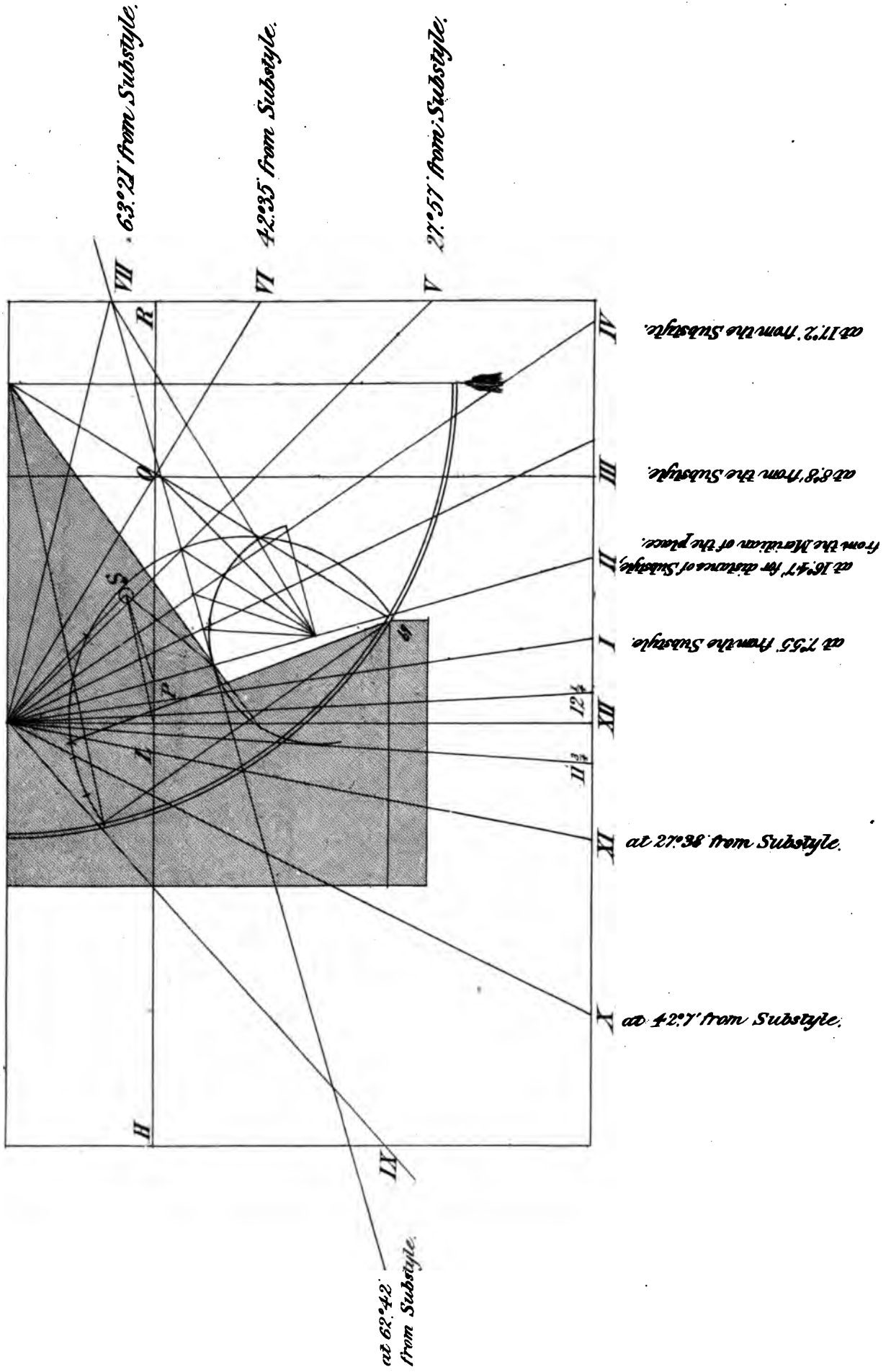


New imitation of the Greek Egyptian Dial, after the rule of Sylvanus Morgan, for an East & West Declining Dial in N. Lat 54° 30'. ~ The three curves of the hollow Semicircle (for the three stories of Noah's Ark) represent the Dialling of the ancient Babylonians for a day of 12 hours in all seasons of the year. ~

An Upper Inclined East Dial, adapted for Whitby N. Lat. $54^{\circ}30'$; from Plate XX fig. 66 (see p. 82. of appendix to this tract.) as a Declining South Vertical for Co-Latitude $35^{\circ}30'$; illustrating the Typical structure of the Greek Egyptian Dial, with steps.



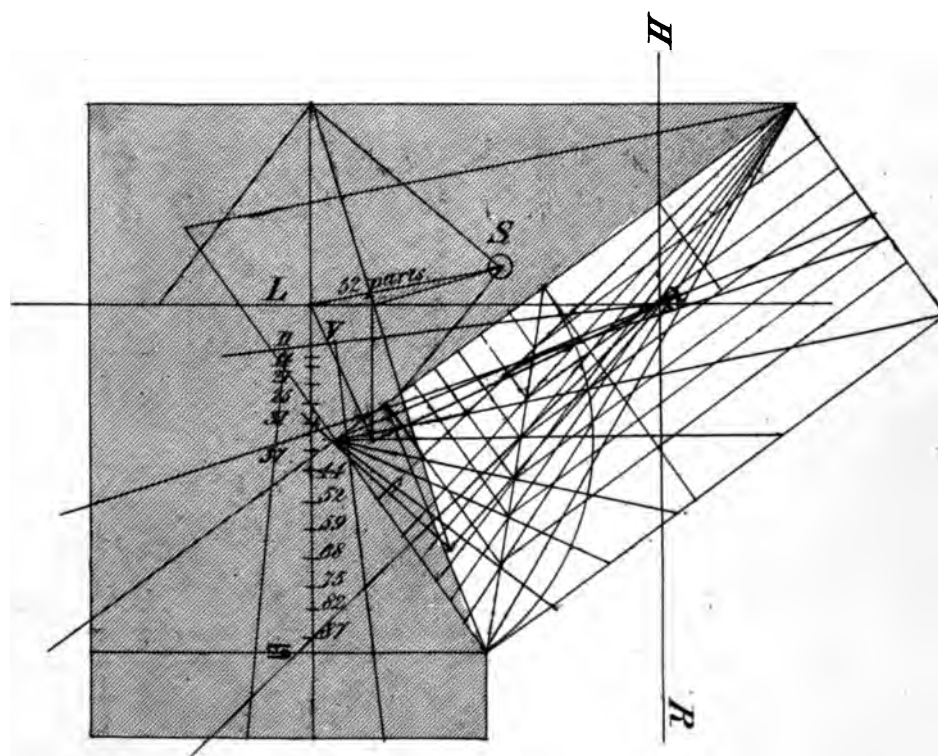
1.5' 52 pax Log 1.716003.



1

1

*For a Meridian to The Goathland School Dial, Declining Westward 25°
as on the West side of the Greek-Egyptian Dial, imitated for N. Lat. 54.*

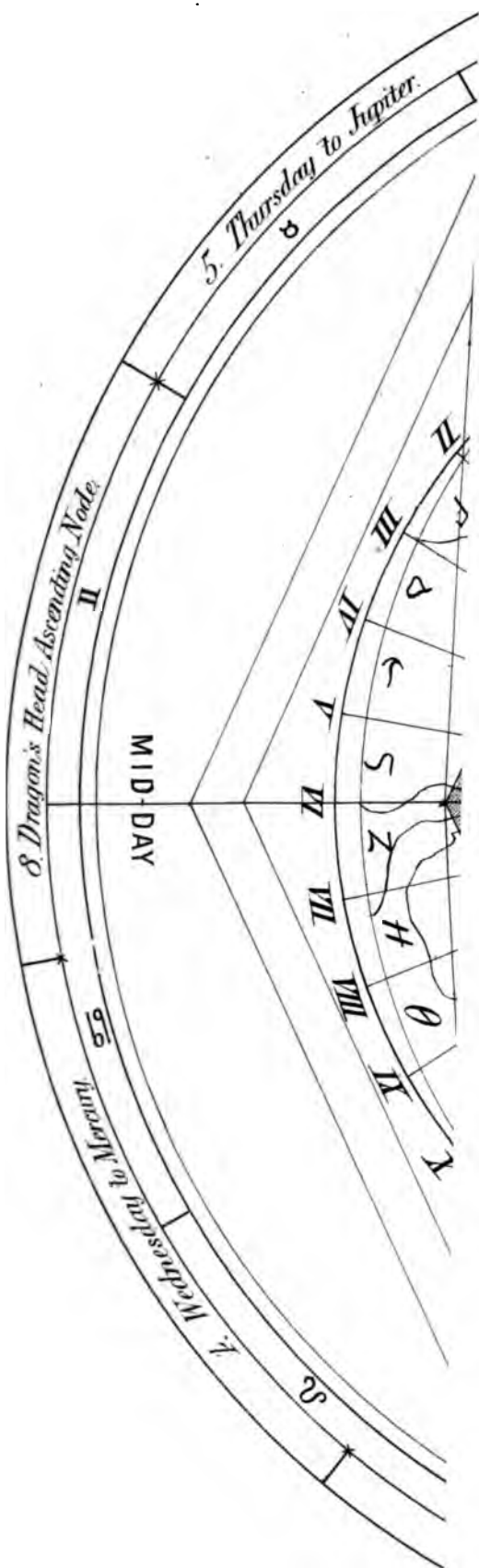


*Westward to the
South for the
Exodus from
Memphis*



centrally to the sun on a Polar Dial.

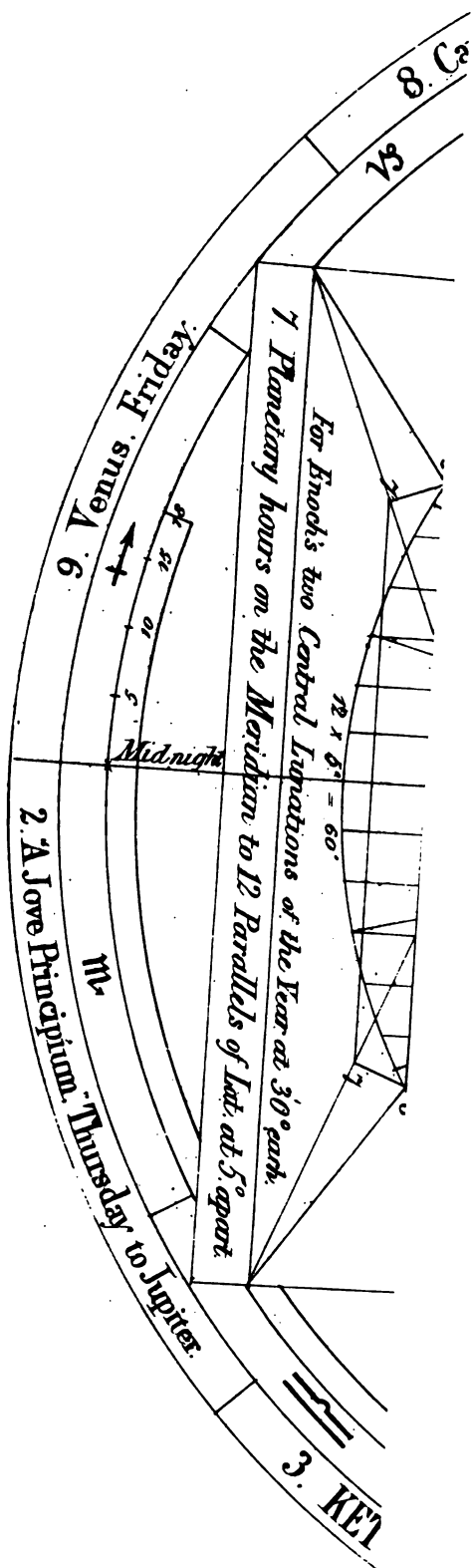
.. 0 0"



centrality to the Sun on a Polar Dial.

.. 00°

... in 110 days of Years; as that of the 8 oldest Gods of Egypt, in the
days of Israel's captivity.

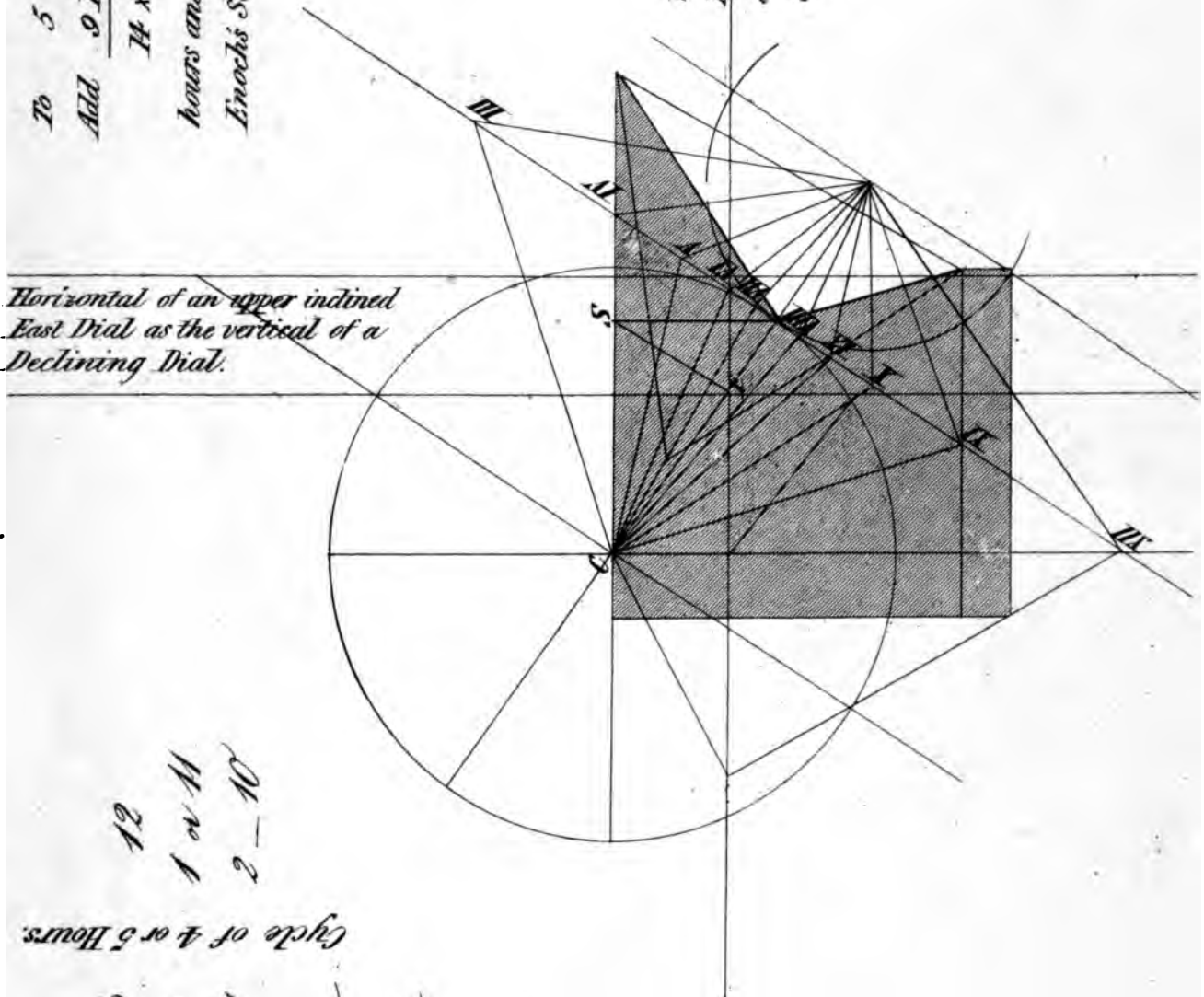


centrally to the Sun on a solar dial.

To 5
 Add 9 Hours
 14 x 26 = 364 for a Cycle of
 hours answering to the days in
 Enoch's Solar Year.

Horizontal of an upper inclined
 East Dial as the vertical of a
 Declining Dial.

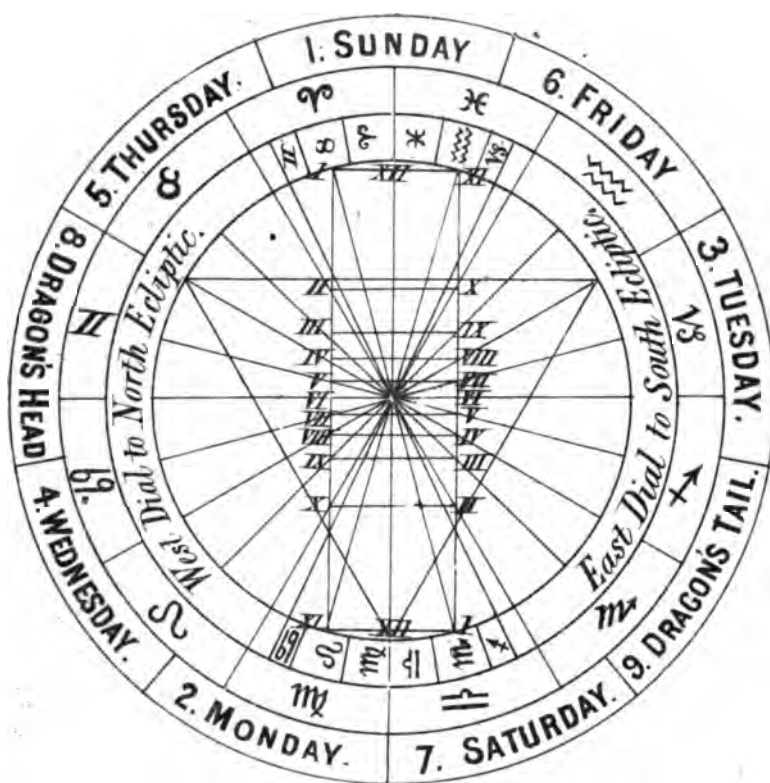
Vertical of an upper inclined
 East Dial as the Horizontal of
 a Declining Dial. Compare Bedos
 & Colles, P. 196. & Plate XX



Cycle of 4 or 5 Hours.

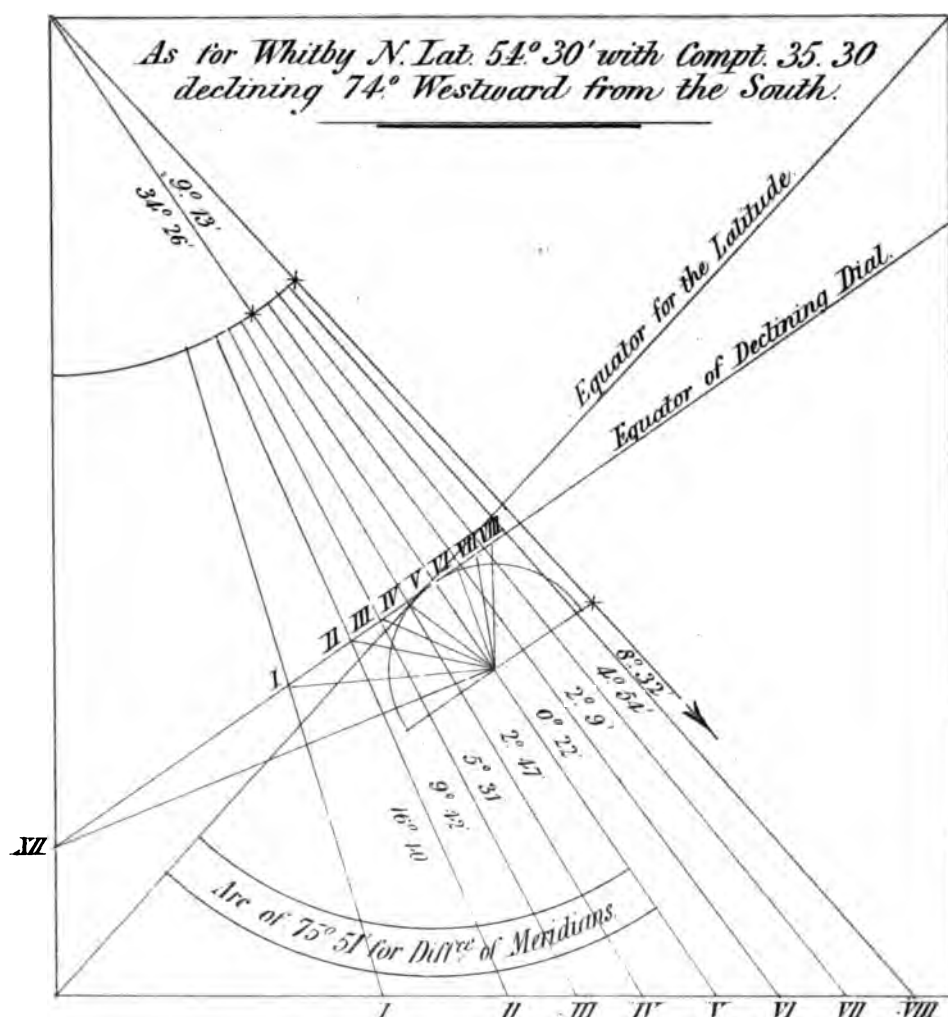
Cycle of 9 or 10 Hours.
 3 - 9
 4 - 8
 5 - 7
 6 - 6
 7 - 5
 8 - 4
 9 - 3
 10 - 2
 11 - 1
 12

12
 1 - 11
 2 - 10



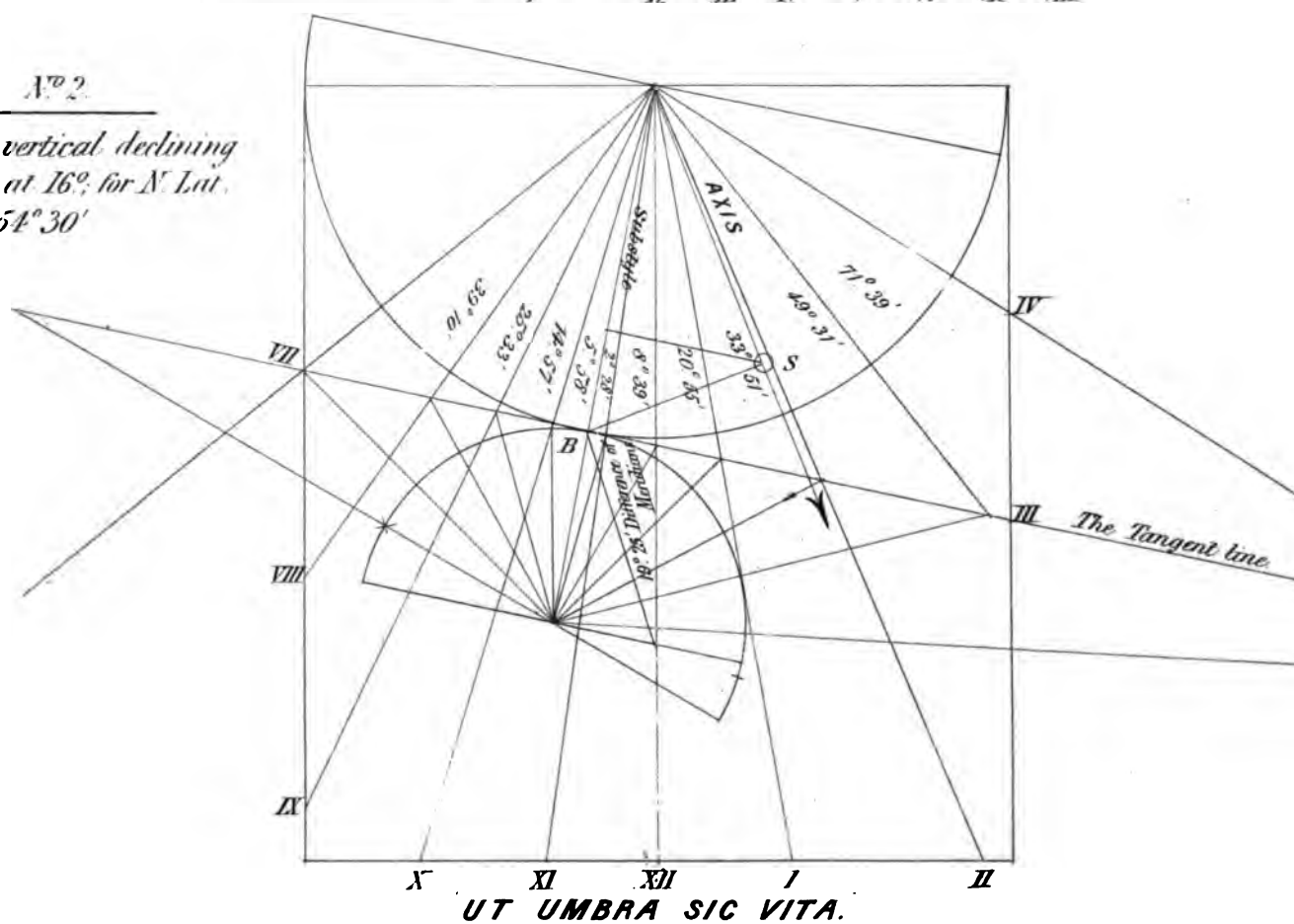
*The Dials at
eights' Church:
N^o 1.*

Dated 1761.



N^o 2.

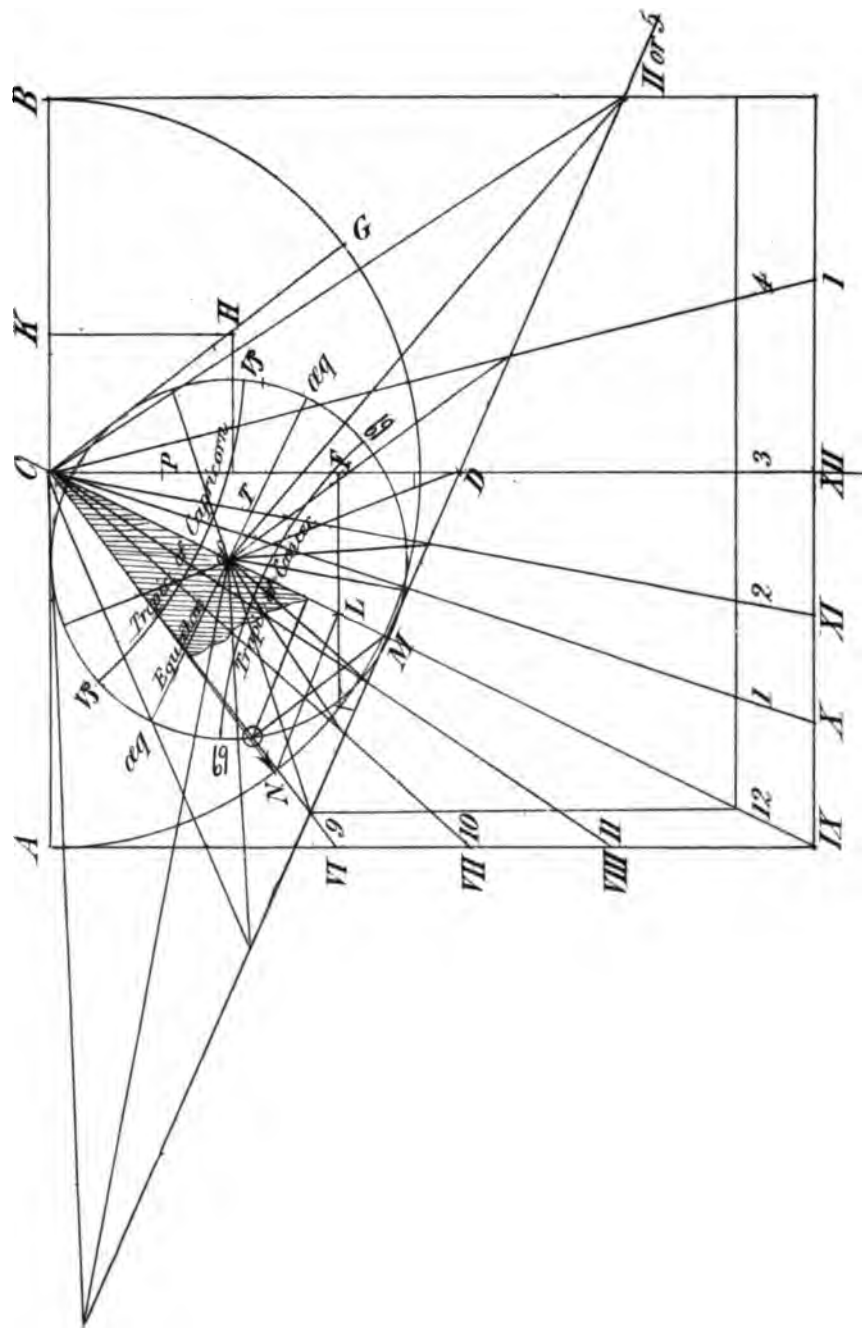
*South vertical declining
ward at 16° ; for N. Lat.
 $54^{\circ} 30'$*



UT UMBRA SIC VITA.

Man's day - as a passing shadow; - "the vapour" of James IV. 14: John XI. 9. Matt

The Lothhouse Dial, dated 1843, with Declination Eastward at 38° , for inclination of Meridians at Circ 45° , or 3 hours apart, between London & Madagascar.





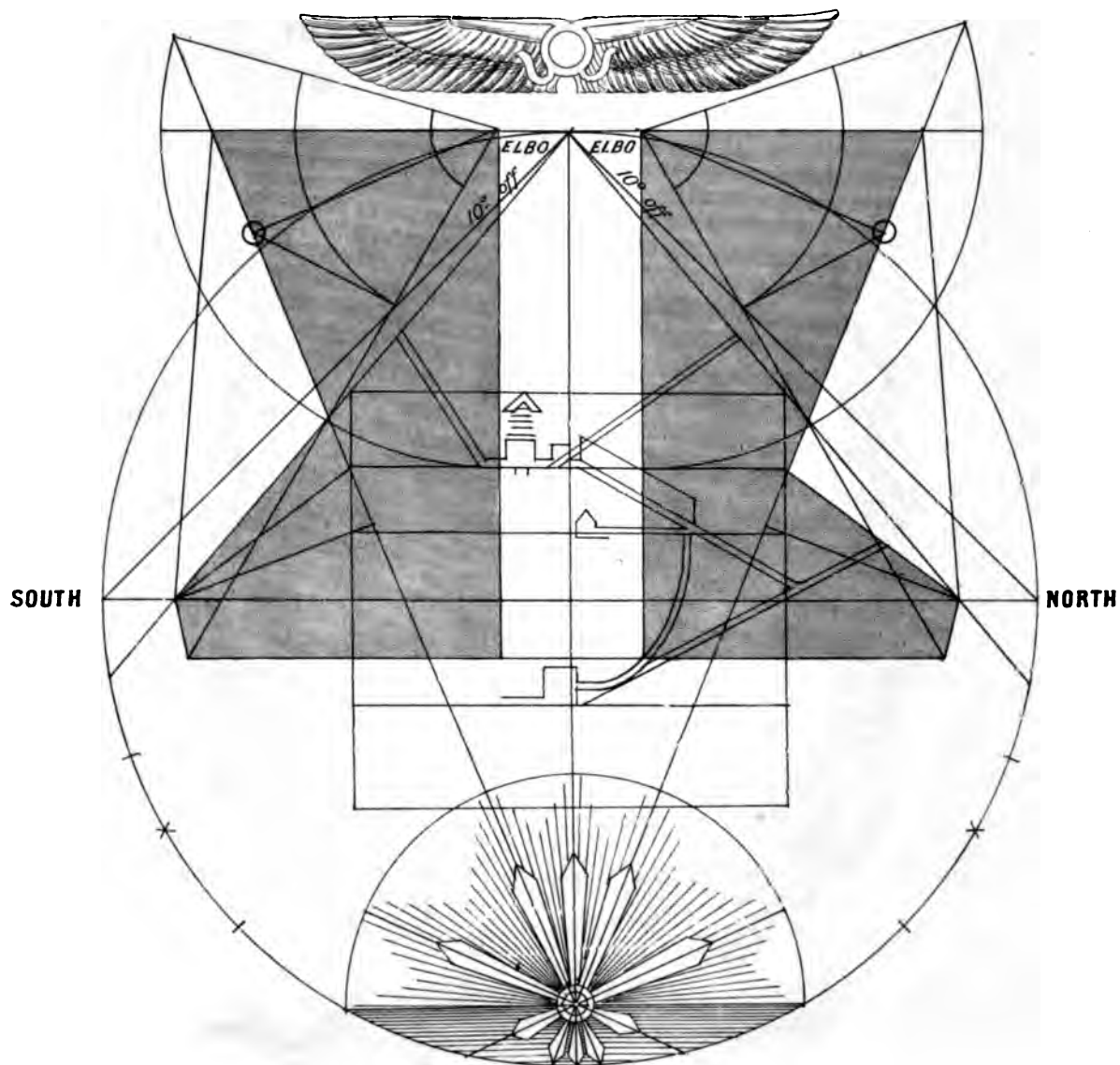


The Theatre at MACAO, from a *small* Photograph, purchased at an Exhibition in London of Chinese Scenery, at a Gallery of Water-coloured Paintings,
by Hildebrandt, *circa* 1865, in Pall Mall.

THE WINGED DISC; OR, SERAPHIC EMBLEM OF THE ANCIENT EGYPTIANS

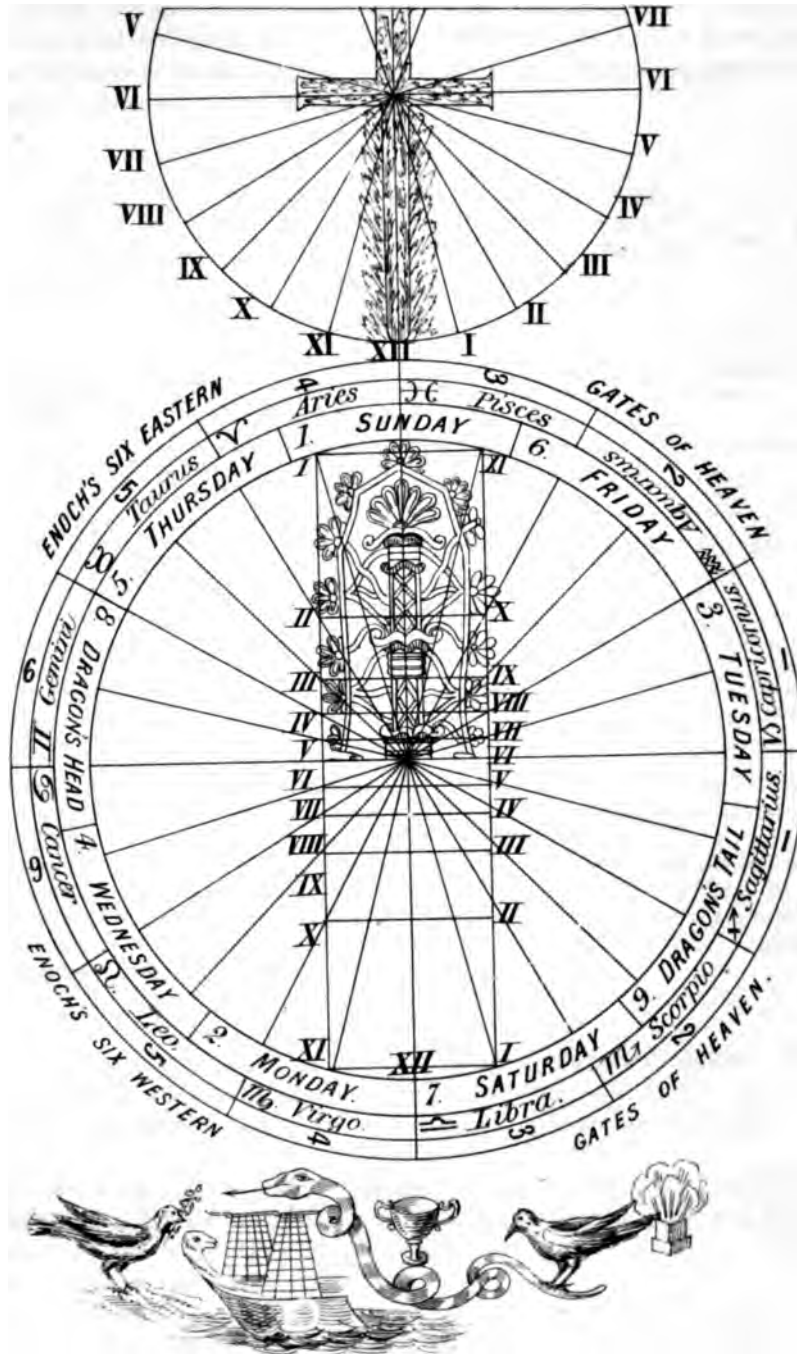
To the Meridian of their East and West Typical Dialling, compared with
Piazz Smyth's meridian section of the Great Pyramid.

On this typical division of the Ecliptic Northward and Southward to the East and West, compare Gen. iii. 24 with Zech. xiv. 4, on the Mount of Olives, which is before Jerusalem *on the East*, being similarly typified to the "Advent of Messiah, as the SUN of Righteousness."



The fiery sword which turned every way to guard (as unto God) the way of the Tree of Life given to the intersection of the Equator by Earth's Axis, in the four Quadrants of their East and West Dialling.

The decorated cross of the Anglican Church Calender,
as the fiery sword of Gen. iii. over the Cherubim
guarding the way of the Tree of Life.

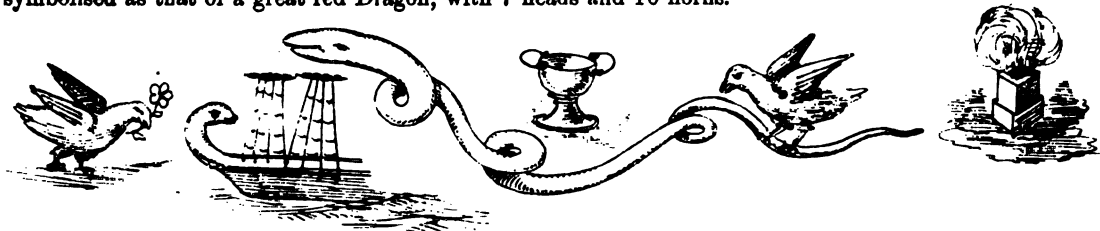


A TABULAR ILLUSTRATION

OF THE ANCIENT ORIENTAL DRAGON-WORSHIP CONNECTED WITH THE RECKONING OF 40° TO
A DAY ON THE HINDU ZODIAC FOR THE WEEK OF 9 DAYS, AS $9 \times 40^\circ = 360^\circ$.

THE Hindu Zodiac of $9 \times 40^\circ = 360^\circ$ for the days of the old solar year, compared with the lunation of 30 days, divided into 4 lunar circuits of 7 and 8 days alternately. Each lunar circuit was thus measured by a quadrant of 90° in the astronomy of Enoch (chap. lxxi. 11, and lxxiy. 5), for the two equinoctial lunations, when the Moon sets with the Sun, viz., in his *third* and *fourth* gates. Of these four lunar circuits, two were numbered southward to the descending node of the *Raven by the tail of Hydra*, near the Sun's *first* gate, and two northward to the ascending node of the *Dove by the head of Hydra*, near the Sun's *sixth* gate.

From this we may trace the source of the metaphor in Rev. xii. 3, wherein the opposing power to the anti-idolatrous mission of Israel is symbolised as that of a great red Dragon, with 7 heads and 10 horns.



8. Ascending Node.		5. Thursday to Jupiter in the Sun's 5th Gate.		1. Sunday to the Sun between his 3d and 4th Gates.		6. Friday to Venus.		3. Tuesday to Mars, the 1st Gate.	
Eastward	II	8	7	X	∞			13	
The Sun's 12 Gates.	6th Gate.	5th Gate.	4th Gate.	3d Gate.	2d Gate.			1st Gate.	
Westward	∞	9	11	∞	11			†	
8. Asc. Node.		4. Wednesday to Mercury.		2. Monday.		7. Saturday.		9. Descending Node. Dragon's Tail.	
								8. Tues.	

2 Lunar circuits from the Sun's fourth gate until going forth from his fifth gate and returning to his fourth gate, for the Full Moon of this lunation.
These give Wednesday and Thursday to the Moon in her opposition, after the time of Full Moon in the Sun's *third* gate, on her return from the Sun's *first* gate, as numbered to *Tuesday*. Hence the order of—3. Tuesday, 4. Wednesday, 5. Thursday.

2 Lunar circuits from the Sun's third gate to his first gate, and back again to the place of the Full Moon in the Sun's third gate.
These give Friday and Saturday to the Moon in her opposition, after the time of the Full Moon in the Sun's *fourth* gate, on her return from the Sun's fifth gate, as numbered to Thursday. Hence the order of—6. Friday, 7. Saturday.

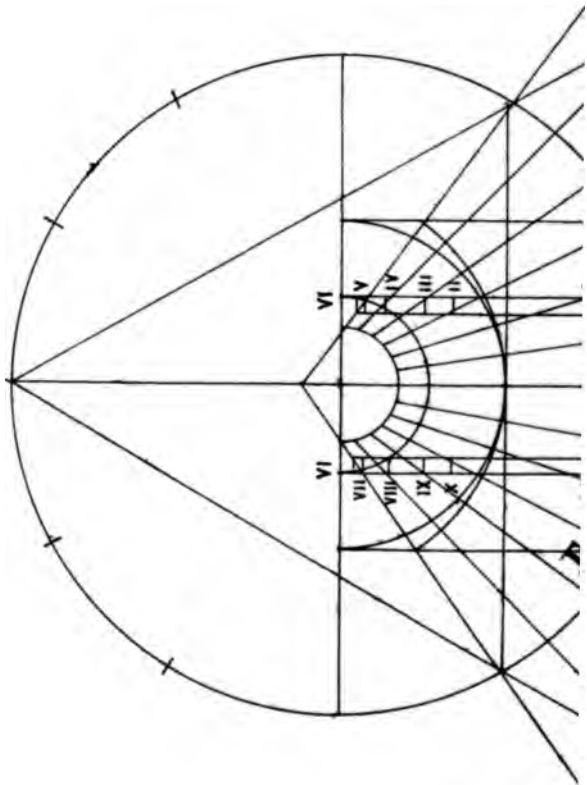
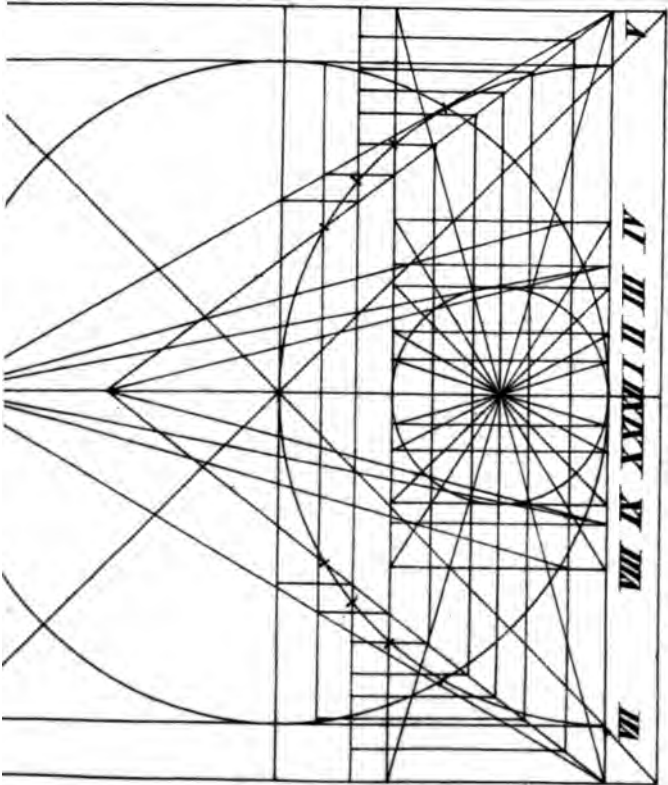
1 and 2 centrally
to the Sun and Moon.

For the week of 9 days, compared with the week of 7 days, we must substitute two lunations of 27 days for Enoch's two of 30 days each. Thus we compare 3 weeks of 9 days with 4 of 7 days, instead of 3 of 10 days with 2 of 7 and 2 of 8, for the lunation of 30 days. But two months of 27 days each number 54 days, or 6 weeks of 9 days approximately, for 8 of 7, or 56 days.

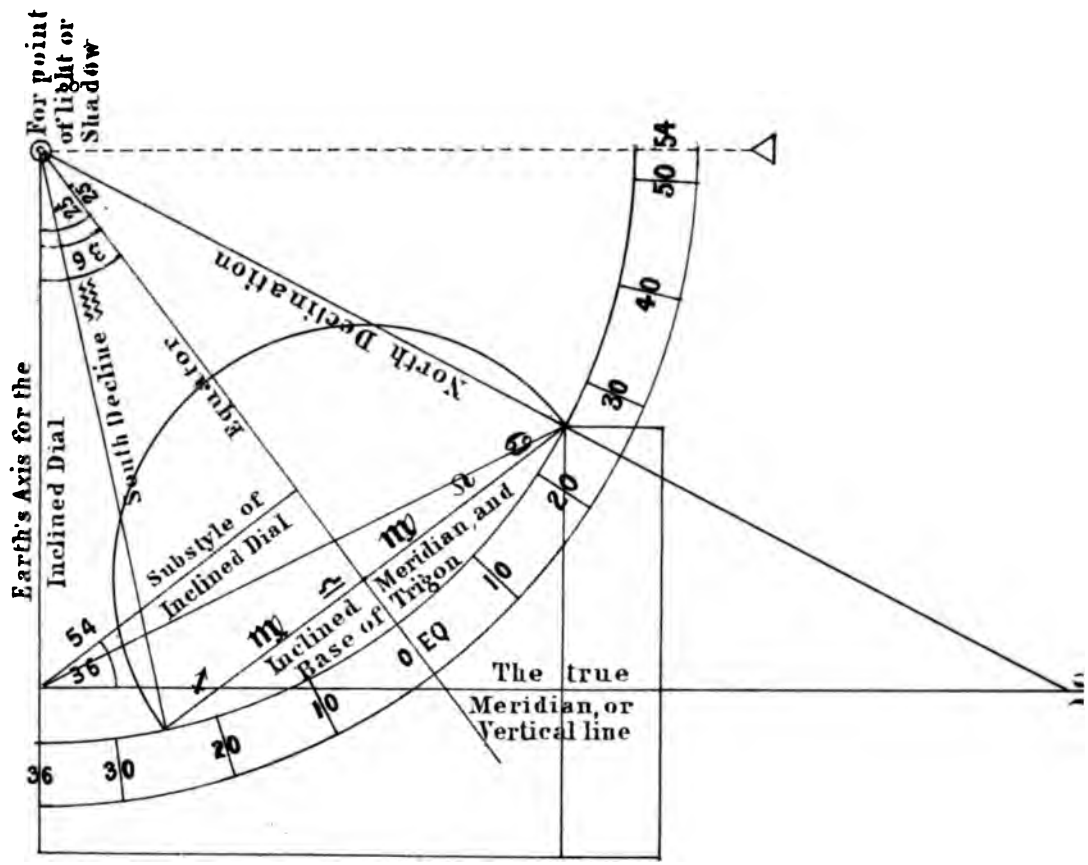
If each lunar circuit of 7 and 8 days alternately was measured by a quadrant of 90° (when dividing the equinoctial to the lunation of 30 days, compared with its division to the week of 9 days, at 40° to a day, for $9 \times 40 = 360$), then each day in these lunar cycles of 4 weeks to 30 days would represent 12° on the equinoctial, for $12 \times 30^\circ = 360^\circ$, and $7 \times 12^\circ = 84^\circ$ to Helius. This symbolism, therefore, substituted a cycle of $4 \times 84^\circ = 12 \times 28^\circ$, or 336° for $4 \times 90^\circ = 12 \times 30^\circ$, or 360° . Hence it seems clear to me that the 7 parallel lines for the front steps of this typical dialling will measure a lunar circuit of 7 days, divided as $6 \times 12^\circ = 72^\circ$ for six measures of ascending and descending light, with the difference between 72° and 90° , numbered *solstitially* to the Sun.

Thus we trace an exact correspondence between these diurnal arcs on the front steps and the *radiating hour-lines* of the *semi-diurnal arc on the curved part*, as representing $6 \times 12^\circ = 72^\circ$.

Hence we seem to trace, on this typical dialling of the ancient Egyptians, the source of the metaphor under which the diurnal arc of $12 \times 12^\circ = 144^\circ$ was multiplied by thousands for the first fruits of the world's redemption from the superstitious darkness of an idolatrous and dragon-worshipping Baalism, to worship God in the spirit of Christ, the Sun of Righteousness, as "children of light and of the day."

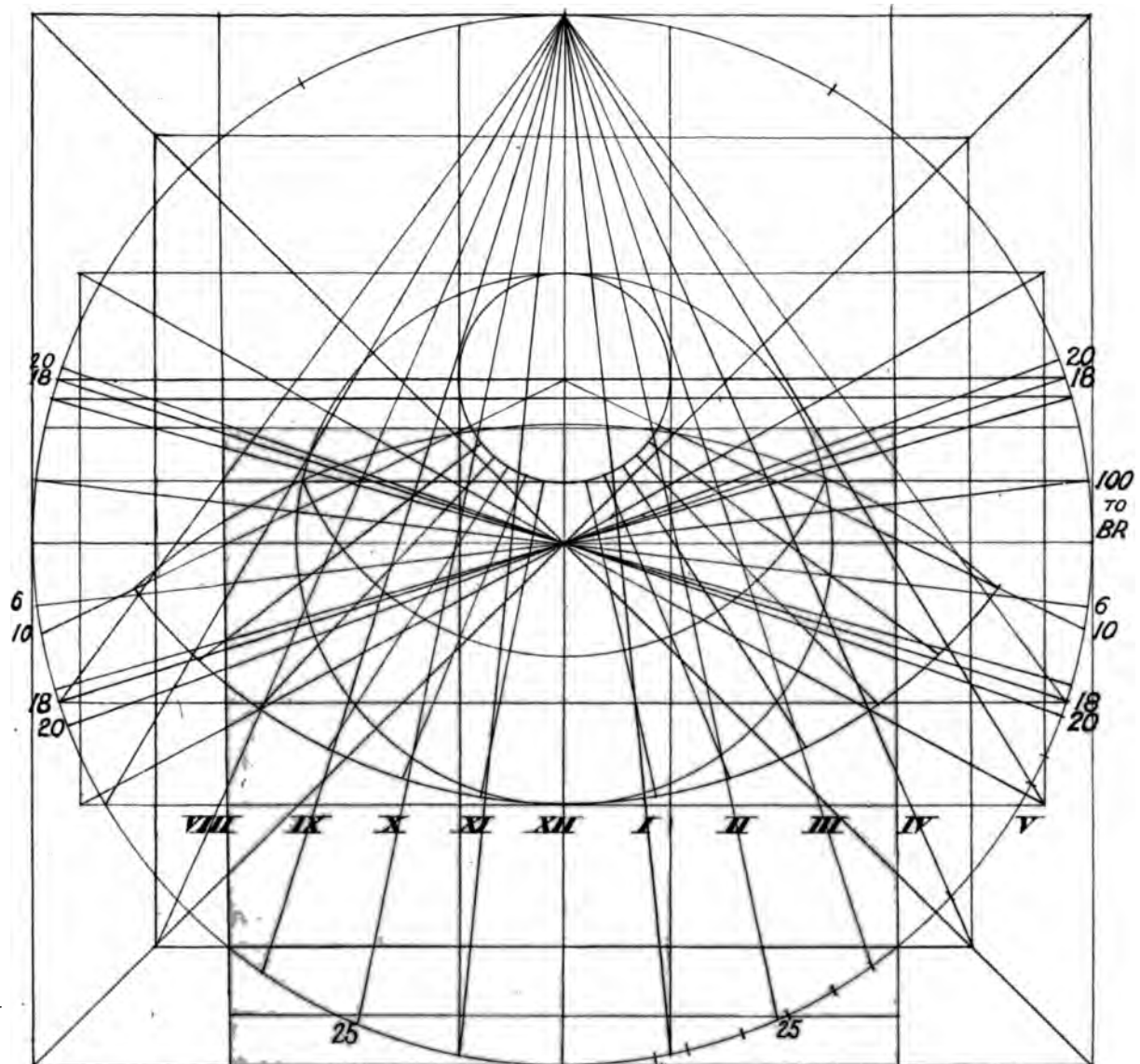


West Side of a Dial for N. Lat. 54°, constructed like the
Greek-Egyptian Dial with Steps.



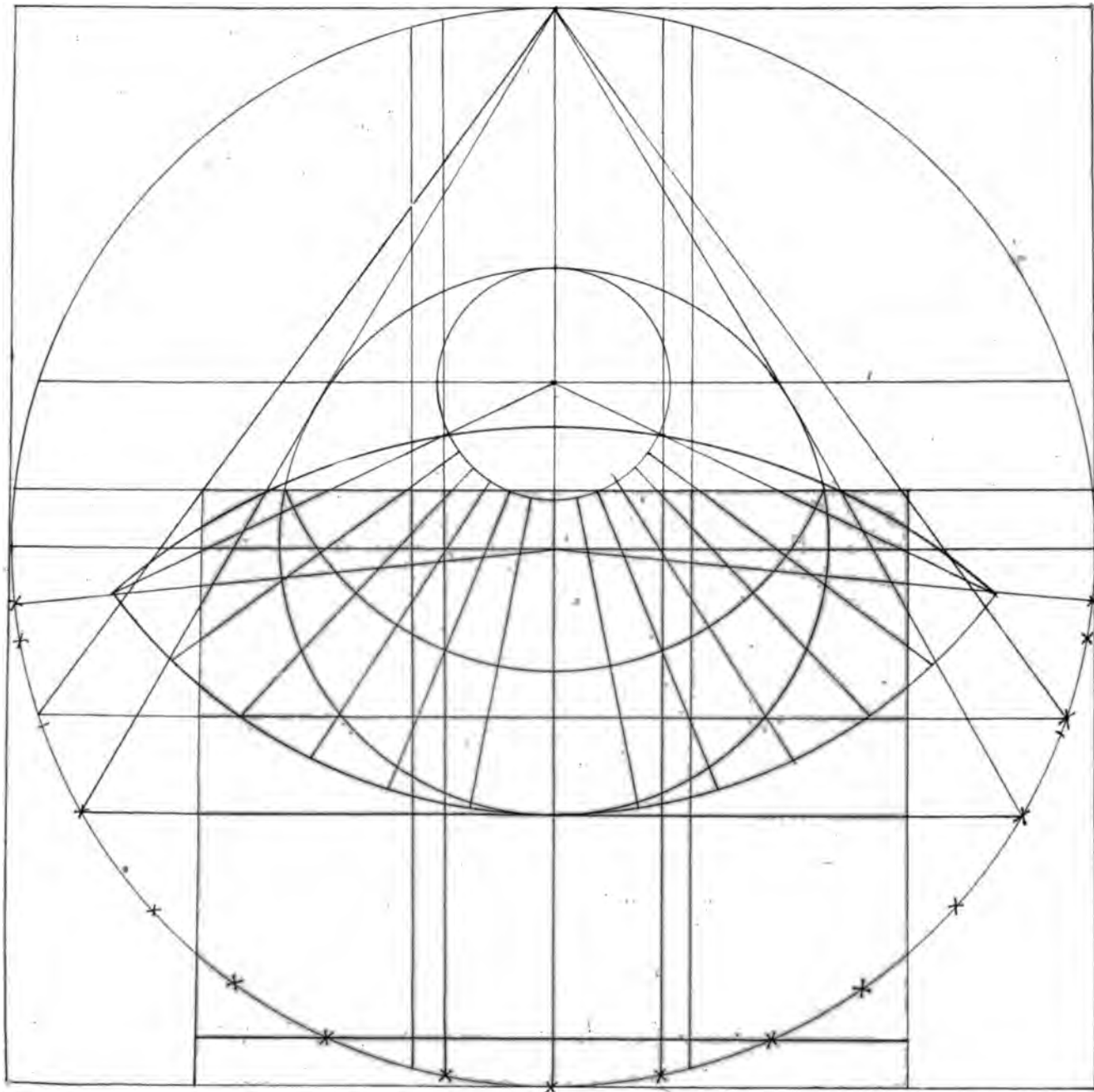
FOR THE EXHIBITION TRACT.

**The Alexandrine Dial on the same Scale of Outer Circle as
its imitation for N. Lat. 54.**



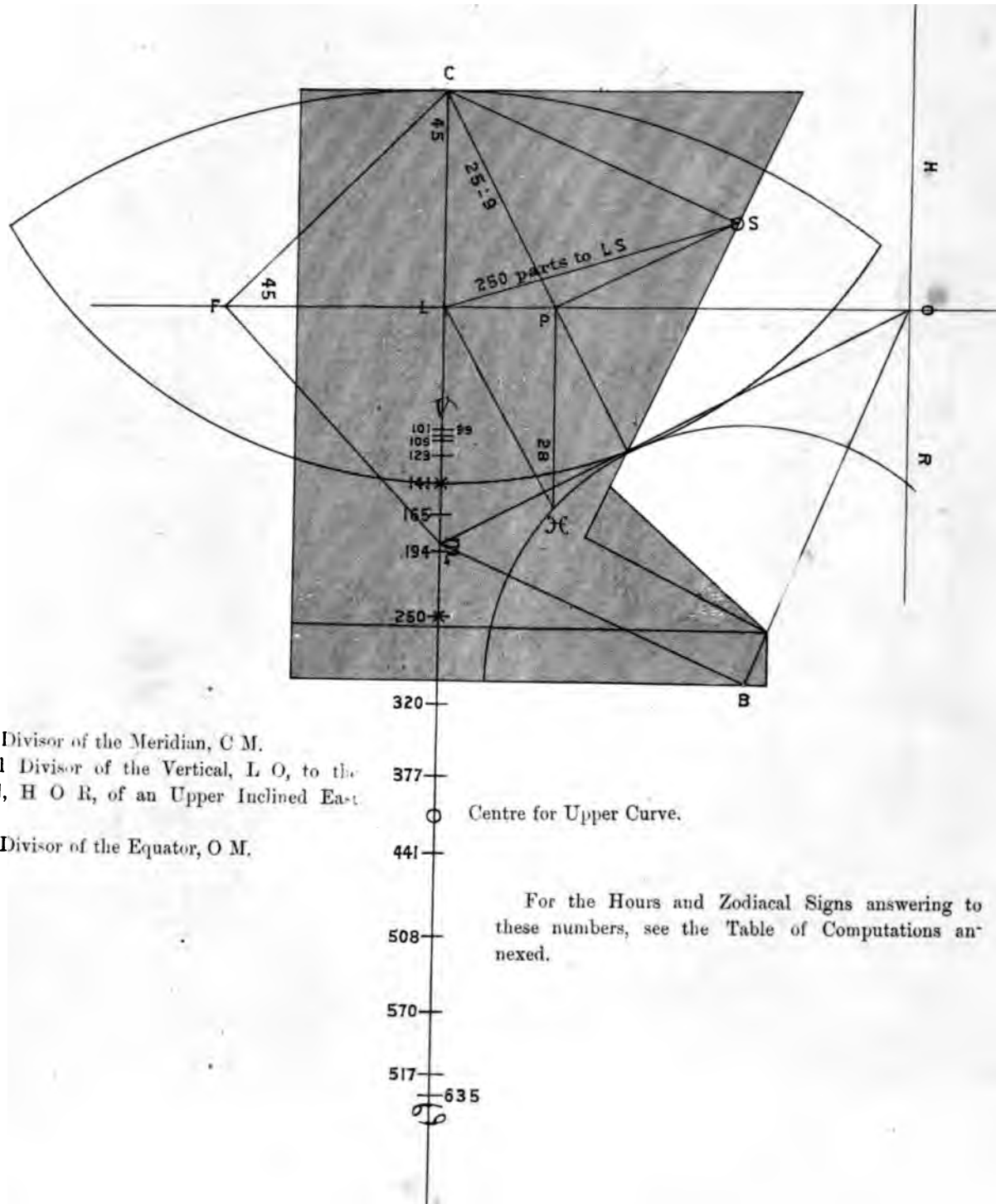
FOR THE EXHIBITION TRACT.

The Alexandrine Dial verified, *definitively*, on the Scale of the Model made for me by Mr A. HAYES of the British Museum.



**THE MERIDIAN OF A DECLINING SOUTH VERTICAL DIAL,
Divided to the Sun's North Declination, as on the Seven Steps of the Greek-Egyptian Dial.**

○ Centre for Lowest Curve.



Central Divisor of the Meridian, C M.
Central Divisor of the Vertical, L O, to the
Horizontal, H O R, of an Upper Inclined East.
Central Divisor of the Equator, O M.

○ Centre for Upper Curve.

For the Hours and Zodiacal Signs answering to
these numbers, see the Table of Computations an-
nexed.





MEDEA D'ARLES

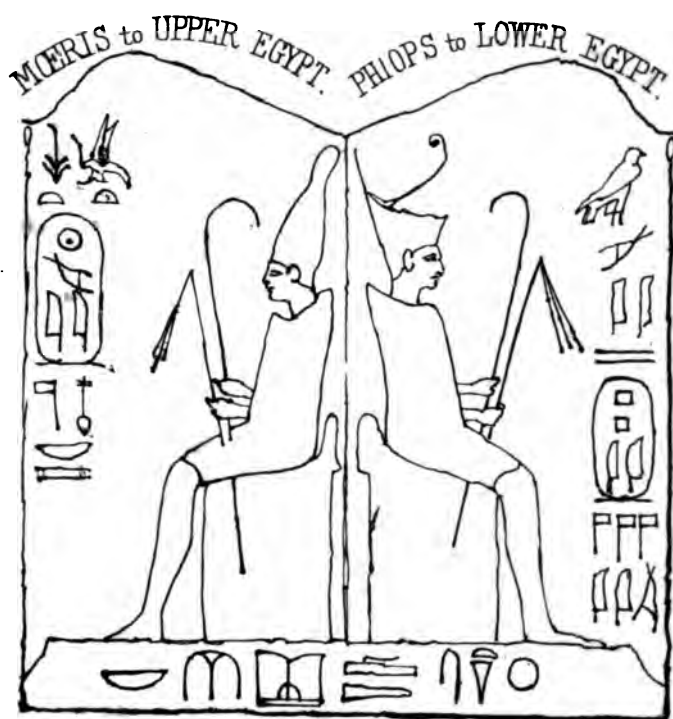


MEDEA D'ARLES

The interlacing of the two aquatic plants of Egypt, depicted on the throne of the Pharaohs, holds among the Egyptians the same rank and importance as the *symbolic* Tree of Life at Khorsabad does among the Assyrians. (See Bonomi p. 160, and compare Rev. xxii. 1, 2, for the relation of the River of Life to the meridian on the East and West Dialling of the Ancient Orientals.)

The Lotus on symbol *neb*. Lord was the national emblem of Upper Egypt (Bunsen, vol. 1, p. 522)

Papyrus plants on symbol of land, or in a pool, were the emblem of Lower Egypt and the Delta.



(?) The Janus of the Egyptians, for the beginning of their year southward at the winter tropic, as we calendar the year on our Dials by the Trigon.—Copied from Osborne's "*Monumental Egypt*," vol. ii., p. 75.

SUN DIAL WITH PORTABLE MERIDIAN

VI
VII
VIII
IX
X
XI
I
II
III
IV
V

Q? Gnomon at 43° comp of $47^\circ = 2 \times 23\frac{1}{2}^\circ$

Gnomon at 38°
as the Comp of 52°
for a South Vertical

APPLICATION OF THE EQUATOR

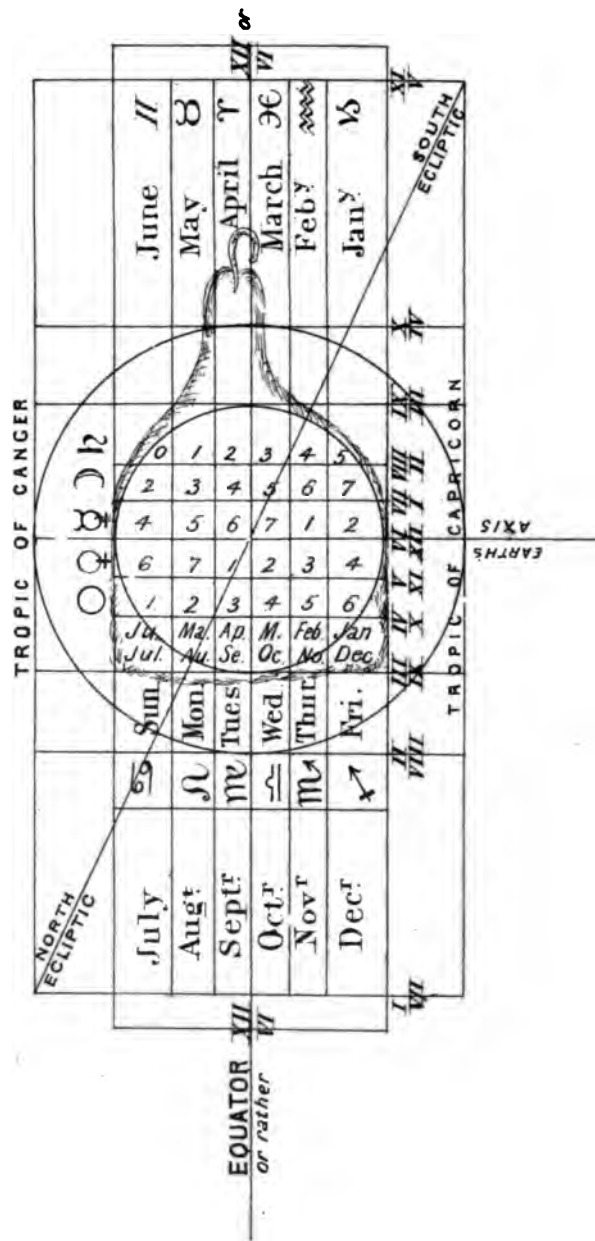
ZODIACAL angle of 25° Northwards from the Equator

25
20
10
0
10
20
25

Thus, *one* latitude marking on the Alexandrine Dial is clearly 40° , the complement of 50° ; or of $2 \times 25^\circ$, the then zodiacal angle.

1941

1942





THE PLANETARY AND EQUINOCTIAL DIALLING HOURS OF THE GREEK-EGYPTIAN DIAL, WITH STEPS,

